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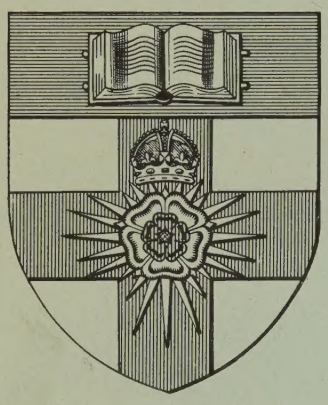

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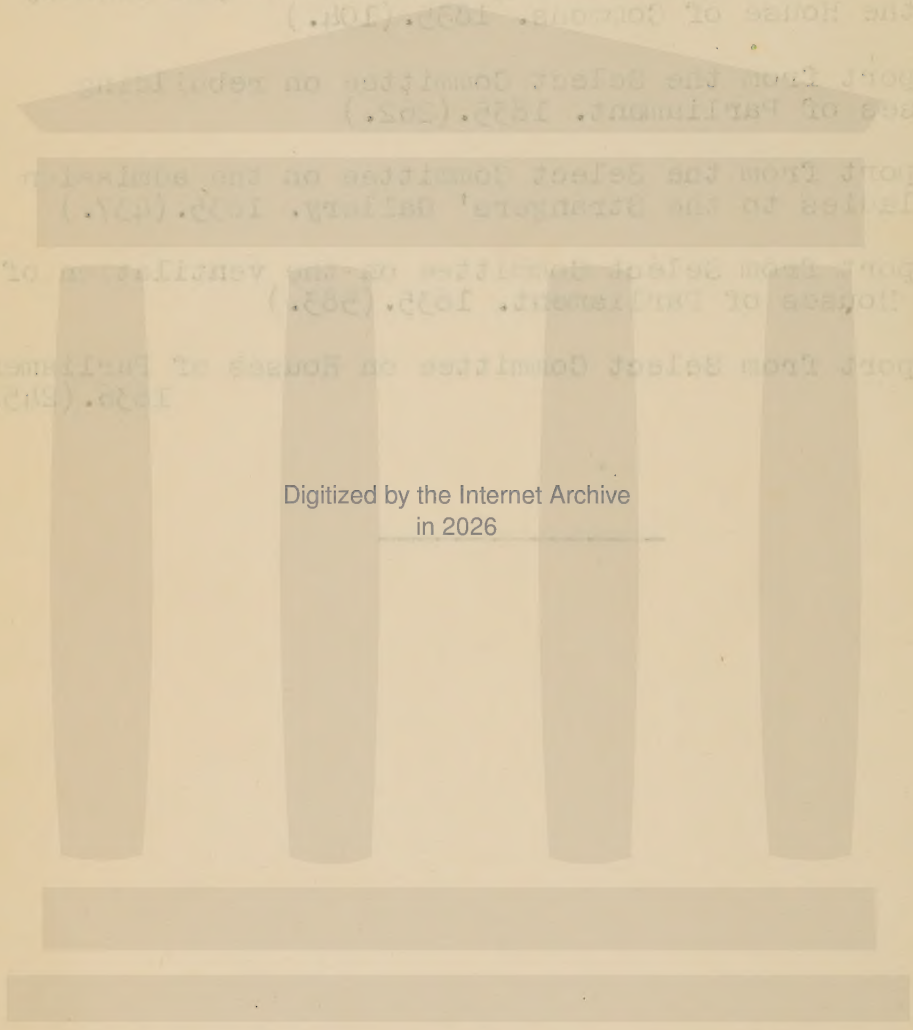

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REPORT

OF THE

LORDS OF THE COUNCIL

RESPECTING THE

DESTRUCTION BY FIRE

OF THE

TWO HOUSES OF PARLIAMENT:

WITH

THE MINUTES OF EVIDENCE.

(PRESENTED BY HIS MAJESTY'S COMMAND.)

Ordered, by The House of Commons, *to be Printed,*
25 *February* 1835.

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REPORT.

AT THE COUNCIL CHAMBER, WHITEHALL,

The 8th Day of *November* 1834.

BY THE LORDS OF HIS MAJESTY'S MOST HONOURABLE PRIVY COUNCIL.

THE Lords of the Privy Council who were directed to investigate the causes of the late Fire which destroyed the two Houses of Parliament and other Buildings, have examined various persons touching the same, and report as follows:

In consequence of an Order of the Treasury directing the Board of Works to destroy the Wooden Tallies and Foils which remained in the Tally-room of the Exchequer (which was required as a temporary accommodation for the Court of Bankruptcy), and which tallies and foils were understood to be useless, Mr. Milne, one of the Commissioners of Woods and Forests, appointed Mr. Phipps, the Assistant Surveyor of Works and Buildings, to meet him on Tuesday morning, the 14th of October last, who accordingly met him at the tally-room, and Mr. Milne then pointed out to Mr. Phipps such of the tallies and foils as were to be preserved, and directed him to take steps for destroying the rest, and, pointing to a chimney in the room, said, "If you burn them there you must be very careful, as the building is only of wood and plaister;" upon which Mr. Phipps said that he intended to have them taken into the yard and burnt. To this Mr. Milne thinks he made no reply, but gave some caution to be careful. This is the account given by Mr. Milne in his second examination, correcting or explaining in some particulars his first. Mr. Phipps states that Mr. Milne gave him directions to burn the tallies in the Exchequer yard, or some other convenient place. Mr. Milne says he is confident that he did not give such directions, or any directions, otherwise than by approving of what Mr. Phipps said about burning them in the Exchequer yard. Mr. Phipps saw Mr. Weobley (the Clerk of the Works) the same day, and told him to have the tallies and foils burnt, stating that Mr. Milne had directed them to be burnt in the yard, to which it appears, by Mr. Weobley's statement, although Mr. Phipps, to the best of his recollection, denies it, that Mr. Weobley objected at the time, saying it would alarm the neighbours. Mr. Phipps states that, to the best of his recollection, Mr. Weobley said that the order should be obeyed, and did not suggest any place for burning them till the next day. Mr. Weobley is positive that he stated the above objection, and that Mr. Phipps then said, "You may do it where you can;" and it struck me, says Mr. Weobley, "that the stoves of the House of Lords would be a safe and proper place to do it in." He does not, however, appear to have mentioned the place at that time to Mr. Phipps, and both agree that it was not till the Wednesday that any plan was mentioned, except burning in the Exchequer yard. Mr. Phipps in his second examination again denies that Mr. Weobley made the objection mentioned by him to burning in the yard, or that he said, "You may do it where you can." The point on which they differ does not seem to be very material in the case, as they next day concurred in preferring the mode of burning the tallies in the stoves at the House of Lords to burning them in the Exchequer yard. It appears that Mr. Phipps met Mr. Weobley on Wednesday the 15th, in Palace-yard, when Mr. Weobley suggested to Mr. Phipps the burning of the tallies in the flues of the House of Lords. Mr. Phipps acquiesced in the suggestion, saying he thought it a very good plan. It will be observed that although Mr. Milne parted with Mr. Phipps on the previous day, in the understanding that the tallies were to be burnt in the Exchequer yard, the change of plan that took place was never communicated to Mr. Milne, or his assent required to the burning in the flues, of which Mr. Milne remained entirely ignorant till after the fire had taken place. Mr. Phipps in justification of his agreeing so readily to the proposal of Mr. Weobley,

says that he considered Mr. Weobley as a careful man, and that he would see to and superintend the burning of the tallies himself; and Mr. Phipps adds, that if they had been burnt in small quantities, he is still of opinion no damage could have happened; he says it did not occur to him at the time that he was running counter to Mr. Milne's orders, and he considered the furnaces as a safe place to burn the tallies in, and that he did not give directions to Mr. Weobley to burn the tallies in small quantities because he had always known Mr. Weobley to be a very careful man. Mr. Weobley employed to burn the tallies two workmen in the service of contractors with the Board of Works, but who were in the constant employment of the Board, receiving their orders from Mr. Phipps, and held to be at the disposal generally of the officers of the Board of Works. One of the men, Joshua Cross, had some years before been convicted of felony and sentenced to seven years transportation, but had only suffered imprisonment in the Penitentiary, and had, after three and a half years confinement, been taken back (with a certificate of good conduct from the Governor) by his former employer, Mr. Holroyd, then also a contractor with the Board for plumber's work, and had in consequence come into the employment of the present contractor, Mr. Clarke. Mr. Weobley directed the two men to bring the tallies from the Exchequer on Wednesday evening, which they did on a mason's truck, going several times for them; there were about two one-horse cart loads. Mr. Weobley desired the men to burn them slowly, only a few at a time. They began the operation of burning at half-past six the next morning, Thursday, the 16th of October. They represent that they obeyed Mr. Weobley's orders, and put on only a handful of ten or twelve tallies at a time, damping them occasionally with water, and laying them three deep in the bottom of the furnace, and not adding a second handful till the first was nearly consumed. Richard Reynolds, a fire-lighter, whose business is to attend to the furnaces when the House of Lords is sitting, gives a very different account, for he says that going to them between nine and ten o'clock he remained for three or four minutes, and he saw them laying the tallies as fast as they could into the furnaces, putting in five or six handfuls at a time, each handful containing 10 or 12 tallies, and filling the furnaces up to three-fourths of their height; that he knows the flues well, having fed them; there was an astonishing blaze going on; he could hear it perfectly; there was a great flame; they were filling both the flues with great rapidity; he says he told Cross that he was going on very rapidly burning the sticks; Cross made no answer, and Reynolds left them. The men, on the other hand, positively state, that they never filled the furnaces so as to make the fuel stand higher than three or four inches, and certainly not so high as six. By Reynolds' account, the height of the fuel could not be less than nine inches. Mr. Weobley says, he came at an earlier hour, between seven and eight, to see the work going on, and he found the men following his directions; that he returned twice again in the course of the morning, and made the same observation. His account certainly coincides with that of the men; but if, as Mr, Weobley seems fairly to admit, the operation of burning in the furnaces was the cause of the fire which afterwards took place, it is impossible to account for it in any other way, than that the consumption of tallies went on much more rapidly, and that the furnaces were fed much quicker and filled much fuller with the fuel, than the men represent; and if Mr. Weobley's observation was correct at the times he saw the work going on, the men must have departed from his directions during the intervals between his visits. It is to be observed, that Mr. Weobley did not go there after three o'clock, and that the burning continued till between four and five; nor was any report called for or made to Mr. Weobley when the work was completed. Before five o'clock, or thereabouts, the men retired from their work and went to their homes. Mrs. Wright, who acted as housekeeper of the House of Lords, in the absence of her daughter-in-law, states, that she had perceived a smoke and smell of burnt wood as early as ten or half-past ten, and that having learnt that it was occasioned by the burning of tallies in the flues, she sent for Cross at that time, and that he came, and that having asked him what he was doing, he said he was burning the tally sticks belonging to the Exchequer; she said, "That is very odd; who gave you the order?" he said the Board of Works; she told him, if Mr. Pulman was there, he would not allow him to do it. She says, she sent again to Cross, about half-past one, and that he sent back a message, that she had no occasion to be alarmed, all was right. At half-past three, she states, that she again sent to Cross the boy Reynolds, who represented to Cross that the House was in a complete smother,

and

and that the throne could scarcely be seen; Cross said he could not help it; that he should be done in about another hour, as he had not many more to burn, and he would see every thing was safe, and that Mrs. Wright need not put herself out of the way about it. Neither Cross nor young Reynolds recollect any thing of the two first messages. Cross says, that about eleven o'clock in the morning he was in the body of the House of Lords; that he got in by knocking at Mrs. Wright's door, which she opened to him; that he went to see whether there was any particular heat. Cross states Mrs. Wright had not sent for him; that he asked her to let him go in, just to see how the flues were, as he was burning some tallies; she said she could smell the smell of wood burning; he said, yes; that they were burning wood instead of coal in the flues; he said there was no danger, or something of that kind, that she wanted to know why he was burning the wood there, and he said it was by Mr. Weobley's orders. Cross further states that he looked at the thermometer, and that that was partly the reason why he went there; that he went and put his hand to the place over the flues to see whether all was safe; that he did not find it particularly hot; did not go to the House of Lords a second time to see if all was safe; did not see there was any occasion to go at all. It must be observed, however, that the state and appearance of the House of Lords during the whole of Thursday were such as to create uneasiness in the mind of Mrs. Wright, and later in the day, and up to the time of her locking up the House, might have caused the most serious alarm. Mr. John Snell, a witness examined, says, that about four o'clock he went with another gentleman to see the House of Lords, which was shown to him by Mrs. Wright; he says that when he went into the House he observed what a quantity of smoke there was, she said, "Yes, the workmen are below;" they remained about a quarter of an hour looking at the House and places adjoining, and were about to leave the House, when, as Mr. Snell says, his notice was drawn to the Usher of the Black Rod's box; that he went over to it, and adds, "when I got very near to the box the heat was so great, I said, 'bless me how warm it is here;' I felt it through my boots." Mr. Snell further states, that he put his fingers down to the floor, and held them there for about a quarter of a minute, and said, "I should almost be afraid this would take fire." "Oh, no!" said Mrs. Wright, "it is a stone floor;" that it was observed by the gentleman who accompanied Mr. Snell, a Mr. Shuter, who was leaning over the box, that there was a suffocating heat; that Mrs. Wright said, "Oh, the workmen are below burning the Exchequer tallies, and I have known when the House was sitting that people who have stood at the spot have fainted;" "and by her making this remark," says Mr. Snell, "my observation was taken off altogether from it." He says he was much grieved that there was so much smoke in the House that he could not see the tapestry, and that he went and put his hand up to convince himself that it was tapestry; that he could not see the Throne from the Bar. It appears, as already stated, that Mrs. Wright herself complained at an early hour of the smell of burning, and that she sent for Cross, as she relates, at half-past one; she says she found the House much worse, and sent for him again, and once more, for the last time, about four o'clock, when the House was in the state just described; that she sent for Jukes the foreman of the matters employed at the House of Lords, who has been examined, and states that he was in the House of Lords on Thursday last about four o'clock, and that he pulled up the bump (a sort of floor-cloth) which was upon the stone against Black Rod's box, that the bump was very hot; he felt it through his shoes; could not hold his hand upon the bump; did not feel the stone; that he told Mrs. Wright it was rather dangerous, and she said, "Yes, it was," and that she had sent to Mr. Weobley's men in the course of the day several times, and they had not attended to it; and she further said she would write off to the Board of Works; cannot tell whether she did so or not; that the bump was wet underneath, or as it is called *sweating*; this was confined to the place near the flue. Mrs. Wright says that Mr. Jukes having been sent for, she said to him, "Jukes, I do not like the appearance of the House, it is very hot below the Bar;" she says that Jukes ripped up the bump, and that she put her hand upon it, and was obliged to take her hand away; this was in Black Rod's box, just where the flue is; Mr. Jukes said, "It is very hot, for this bump is quite in a sweat." I said, "then go again to Cross, for I feel very uneasy, they will set the place on fire;" Cross then sent me word he should be done in an hour, and all was right; but the boy David Reynolds said, "the House is very hot, for it is five degrees higher than in the beginning

of the day; it was fifty-five, it is now sixty." "I sent him to the men," says Mrs. Wright, "but they would go on with it." At five o'clock Mrs. Wright locked up the House in the state in which it has been described, and at six o'clock it was on fire. Mrs. Wright states distinctly that she never made any representation or communication whatever of any kind or in any way to any of the offices or public departments. It appears that the flue runs across the angle of the Black Rod's seat. It further appears that the flue had not been swept since the beginning of the last session of Parliament, being the usual time of sweeping it. The circumstances above detailed, the heat and smell perceived in the morning, and the gathering smoke accumulated in the House of Lords at four, the state of that part of the House near the Black Rod's seat, as spoken to by the witnesses, the situation of the furnaces and flues in reference to that place, and the manner in which the flames were seen bursting out near the Black Rod's seat, all clearly prove the burning of the tallies in the manner in which they were burnt, to have been the cause of the calamitous event which happened. The opinion of Sir Robert Smirke and others, including Mr. Weobley, whose admission is much to his credit, supports that conclusion in which we unanimously concur. It is to be lamented that the plan of burning the tallies in the Exchequer yard, which was originally proposed by Mr. Phipps himself, and agreed to by Mr. Milne, was ever departed from, and that an experiment so full of hazard as that which was resorted to was ever proposed by Mr. Weobley or agreed to by Mr. Phipps, and that too without the assent of or any communication with Mr. Milne, the superior officer. It is to be observed, that wooden tallies had ceased to be used in the Exchequer since the 10th October 1826, when that mode of accounting was abolished on the surrender of the patent of Lord Guildford and Mr. Burgage; except on one occasion, about twenty years ago, when they were burnt in Tothil-fields, the tallies were never, it appears, destroyed otherwise than by being used (after being broken up) by the servants of the office as fire-wood from time to time as it was required. It is strange that the alteration of the plan of burning was agreed to, and with the utmost readiness, by Mr. Phipps, although by his own account he was not put in possession by Mr. Weobley of the objection to the burning in the Exchequer yard. We are, however, inclined to believe the statement of Mr. Weobley, that the objection was made by him on the Tuesday, and that that circumstance, although now forgotten by him, and the entire confidence which Mr. Phipps seems to have placed in the care and prudence of Mr. Weobley, may have induced him to consent so readily on the Wednesday to alter the plan for destroying the tallies. It is unfortunate that Mr. Weobley did not more effectually superintend the burning of the tallies, and see that his orders to burn with caution were carried into effect. He was there only three times during the ten hours of burning, and he does not appear to have been there at all after three o'clock, subsequently to which hour the symptoms of danger arising from the operation thickened and increased until the event took place. This can only be accounted for from his having entire confidence in the safety of the operation, the danger of which never appears to have struck his mind at all, although he directed, as a measure of precaution, the slow burning. The same confidence and security appear to have been felt by the men at the furnaces, whom, under all the circumstances of the case as they have been brought before us, we acquit of all guilty design, although justly chargeable with gross neglect, disobedience of orders, and utter disregard of all warnings. It is unaccountable that Mrs. Wright, when she felt alarmed, as she states herself to have been, was not led by such manifest indications of danger to make immediate representations in the proper quarter.

We think it right that we should here advert to the evidence of Mr. Cooper and of the other witnesses who were examined in reference to his testimony. Information having reached us that Mr Cooper, a respectable tradesman of London, and a partner of the firm of Hall & Cooper, iron-founders, of Drury-lane, was ready to give evidence that he had heard of the fire at Dudley within a few hours after its breaking out, we thought proper to direct that he should attend for the purpose of being examined, and he was examined accordingly on Monday the 20th of October: he stated that he left London by a coach to Birmingham, for the purpose of proceeding to Dudley on Thursday morning the 16th of October; that he arrived at Birmingham about a quarter past seven in the evening, and set out for Dudley about eight by another coach (the Tally-ho), and arrived at Dudley at ten minutes before ten at night; that he stopped at the Bush Inn, in that town, and went into the

the Commercial Travellers' Room, as he was accustomed to do, having used the house frequently; that there were four other persons in the room whom he did not know; that they appeared to be respectable men (commercial travellers); none of them had come with him from Birmingham; that he (Mr. Cooper) called for tea, and whilst he was drinking it one of the travellers, who had his slippers on, went out to the door, and having returned after two minutes absence said, "I have just heard that the House of Lords is burnt down, occasioned by some carpenters being careless with the shavings;" that one of the other gentlemen said, "Is it in the paper?" he said "No, it cannot have got into the paper;" the other said, "How did you hear it?" the person who had brought the intelligence said he had heard it from a person who had come by the coach. Mr. Cooper being asked if the others heard this, said that one of them did not, he was asleep, the others did; that there was nothing more said about it, and that he went to bed; that he heard nothing more on the subject either that night or in the morning; he thinks he could recognize the person who asked the question, but not the one who brought the information; that he left the gentleman who had brought the information in the travellers' room when he went to bed. In a subsequent examination Mr. Cooper says, that he did not hear any coach stop at the door; next morning he states that he breakfasted in the same room and at the same table where he had drunk tea the night before; that he saw two of the same gentlemen in the room whom he had seen the night before, but not the gentleman who had brought in the intelligence of the fire; he says, that one of the gentlemen breakfasted with him. Upon his third examination on the 29th of October, Mr. Cooper recognized a witness produced (Mr. Riddle) as one of the persons whom he saw in the travellers' room at the Bush on the Thursday night, but says that he was not the person who went out and returned, and said he had heard of the fire; did not notice what sort of a gentleman it was that so went out and returned, whether he was of a fair or a dark complexion, tall or short, or middle sized, whether he had a black handkerchief or a white one, or what was his dress, but noticed that he had slippers on; he thinks that the gentleman (Mr. Riddle) was present in the room on Thursday evening when the news of the fire was brought in, but he is not positive. Mr. Cooper further states, that he left Dudley at eight o'clock in the morning or a few minutes after, and went to the Butterley and to the Netherton Iron Works, in the neighbourhood of Dudley, returning to Dudley about eleven o'clock, paid his bill, and left Dudley about a quarter past eleven; he thinks the mail coach had arrived, for he saw the evening paper on the table unopened, the wrapper appeared to have been slipped off, but the paper was unopened; he took it up, and knowing that he had a good deal of business, he put it down again, and did not read it. He left Dudley in a gig, and went to Bilston and Wednesbury, where he was taken up by the Union Shrewsbury coach about half-past two in the afternoon, and arrived at Birmingham about three; he remained there till four, and was in the coffee-room before starting, but not a word passed then on the subject of the fire. Mr. Cooper says, that he can account for this, as the passengers were all from Shrewsbury, none of them from London; states that at four o'clock he left Birmingham for London by the same coach (the Shrewsbury Union coach), of which Thomas Stuckbury, a witness who has been examined, was the guard; he states, that neither at Dudley on the Friday, or at the Iron Works in the neighbourhood, or at Bilston, or at Wednesbury, or at Birmingham, did he hear any thing of the fire, nor did he himself mention the subject to any one; the coach passed through Oxford, where the witness says, that he had the first intelligence of the fire as it had actually taken place; he heard of it from the waiter at the Roebuck on the Friday night; he told the waiter that he had heard of it the night before at Dudley; the waiter said, "indeed! how could that have been?" I said, "I am surprised myself, for I did not see how it could come down," he told me the fire had broken out at seven in the evening. I told him, "I had heard of it at ten."—On his second examination, Mr. Cooper says, that upon this occasion an observation arose from himself (witness), that if it had broken out at seven o'clock it must be the work of an incendiary, for he had heard of it at ten; on being reminded that he had omitted that when he was first examined, he acknowledged that he had. In the same examination he states, that when he said to the waiter that it must be the work of an incendiary, for he had heard of it in three hours, the waiter was going out of the room; he says he afterwards mentioned the circumstance of his having on

Thursday evening heard of the fire at Dudley; that he mentioned it during the night of Friday to the passengers who were with him on the top of the coach, and that one of the gentlemen mentioned it to the guard, who said he did not believe it. Witness said it was a fact, and that he had been informed of it on the Thursday night at Dudley; is positive that he told the guard or the person near him that it was at Dudley, and not at Birmingham, that he first heard of the fire. He says that he had no conversation with the guard or any of the passengers in coming from Oxford to London as to the extraordinary quick time within which the news had arrived. Mr. Cooper, on his first examination, states, that he arrived in London on Saturday morning the 18th of October, at seven o'clock; that he saw his partner, Mr. Hall, first, but did not mention it to him, being very tired and wanting a little rest; nor did he mention it to Mr. Barron when he saw him on the Saturday at two o'clock; says that he first mentioned the circumstance of his having heard of the fire at Dudley to a medical gentleman of the name of Jones, who was attending his family; this was about two o'clock on the Saturday afternoon; states that Mr. Jones called upon him on the Sunday, and said he thought he (Mr. Cooper) was wrong in not communicating what he had heard. On his second examination, Mr. Cooper states, that in his former examination he was incorrect in saying that he had first communicated what he had heard at Dudley to Mr. Jones; it was to his partner that he first communicated it, not the first time he saw him, but afterwards. The above we believe to be a correct statement of every thing that is material in the evidence given by Mr. Cooper on the three several occasions on which he was examined before us. Three witnesses were examined in reference to that part of Mr. Cooper's testimony which embraces the evening of Thursday and the morning of Friday, the 16th and 17th of October. One of them, named Sarah Taylor, waiter at the Bush Inn, at Dudley, says that she attended the commercial travellers' room on both occasions, she is well acquainted with Mr. Cooper, served him with tea in the travellers' room on the evening alluded to; states that when Mr. Cooper was there, there were two other gentlemen (commercial travellers) in the room, she was in the room a considerable time out and in, heard them talking together, there was no conversation about the fire when she was there, did not see any person come in and give any information to them, did not hear of the fire that night from them or anybody else; she heard first of the fire on Friday morning about eleven o'clock. She states that the London mail had arrived about nine o'clock; Mr. Cooper slept at the Bush, and came down in the morning about eight o'clock, and had his breakfast in the same room in which he had his tea the evening before and at the same table; two of the same gentlemen who had been there the night before were in the room with Mr. Cooper at that time; that about eleven o'clock a gentleman of the name of Downing drove in in his gig, and said that the Houses of Lords and Commons were burnt down, and he hoped that it was not true; he said he had come from Manchester and had heard of it at Stourbridge; that was the first intelligence that the witness had of the fire; it was on Friday morning and not on Thursday night; Mr. Cooper was gone when the gentleman came, he paid his bill at ten and went away. She says that the news might have come by the London mail, which came into Dudley about nine o'clock in the morning, but the witness did not hear it so early; the mail had arrived before Mr. Cooper paid his bill. The evidence of Mr. John Riddle we consider to be very material in reference to the point in question; he is a commercial traveller, and was recognized by Mr. Cooper as having been in the travellers' room at the Bush, on Thursday the 16th. Mr. Riddle says, he was there at about a quarter before eight in the evening; that he stayed there till nine o'clock, and then went out and returned in about half an hour; that a gentleman, whom he now understands to be Mr. Cooper, came in about the same time that he (the witness) returned; he saw him have tea; states that he (the witness) did not, at the time when Mr. Cooper had tea, or at any time on that evening, hear of the fire, either out of the Bush Inn or in the Bush Inn; there were two or three other gentlemen there besides Mr. Cooper; that nothing was said by either of them respecting the fire; is sure of that, has not the least doubt of it; witness did not hear of it that night; he was in the room as long as Mr. Cooper, he (witness) remained there till eleven o'clock at night; slept at the Bush, and breakfasted there next morning; does not recollect whether he saw Mr. Cooper that morning or not; after breakfast he (Mr. Riddle) went out and heard of the fire from Mr. Smith, the landlord of the hotel, who told him he had heard

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it from Robins, the coachman of the mail who had come from Birmingham that morning; witness says he went back to the commercial travellers' room at the Bush between nine and ten; being asked whether he then told what he had heard, Mr. Riddle says, "I believe I made use of such a word as this, here's a pretty go, here's the House of Lords and Commons on fire;" does not know whether he said that he had heard it from a gentleman who had come by the coach, but it is most likely he did; says he remained in the room five or ten minutes, that he may have had some conversation about it, he thinks it probable, but does not recollect any; there were four persons in the room, but does not know whether Mr. Cooper was one of them; he says he is positive this was on Friday morning, and that he never heard of the fire till he heard of it at the hotel from the landlord of that house. Mr. Charles Twamley, solicitor at Dudley, states, that he made inquiries first at the Bush and afterwards at the Hotel, the two coach houses in the town, and found that the first information of the fire was received at each of those houses on Friday morning; that he also made inquiries at various places but did not find the slightest trace of the rumour of the fire having reached Dudley, on Thursday evening; that he made dilligent inquiry for the purpose of discovering whether there had been such a report. Mr. Twamley further states, that in consequence of an inquiry on the part of the Attorney General, he (the witness) did write to him to say that a rumour had prevailed on the Thursday morning, but he found that this was a mistake of Thursday for Friday on the part of Sarah Taylor, the waiter at the Bush, and that he wrote to that effect by the following post. Sarah Taylor, being again called, states, that she told Mr. Twamley of the report having reached the Bush Inn, at Dudley, on the Thursday, that she then recollected it was Friday and sent to Mr. Twamley and told him; she says she meant Friday morning, she never said Thursday evening, but Thursday morning, she confounded it with Friday morning; she knew it was in the morning that they heard the report. It will be remembered that Mr. Cooper states, that he heard of the fire on his journey for the first time from the waiter of the Roebuck at Oxford, where the coach stopped in the night of Friday; that the waiter having informed him that the fire had broken out at seven in the evening on Thursday, he told the waiter that he (Mr. Cooper) had heard of it the night before at Dudley at ten; that they both expressed surprise at this, and that he (Mr. Cooper) said he did not see how the news could have come down, and that it must have been the work of an incendiary, which words, however, in his subsequent examination, he says were used when the waiter was leaving the room. We have examined the waiter of the Roebuck, John Whitbread, who states that he remembers the Union Coach coming in from Birmingham on the Friday evening, that it stopped at the Roebuck, and that one passenger came in to sup whom he attended upon; that he (the witness) asked him whether he had heard of the fire, he said he had heard of it; does not recollect that the passenger said where he had heard of the fire; he did not say when he had heard of it; witness does not remember that the passenger said he had heard it the night before, three or four hours after it took place, or at any time very shortly after it took place. Witness never heard him say where he had heard of the fire; the passenger said nothing about incendiaries, nor any thing respecting his way of hearing of the fire, or the time at which he heard it, or any thing which made it matter of wonder that he should have heard of it so soon, or any thing which induced the witness to express any wonder that it should have come in so short a time, or of its being strange that he should have received the intelligence so soon after the event occurred; the witness is positive that he made no observations to the passenger on that subject, and that certainly nothing was said about incendiaries; that there was nothing in what the passenger said which particularly struck his mind; but witness asked him whether he had heard of the fire, and he said he had; that was all that passed; does not think the passenger mentioned the name of the place where he had heard it; he was the only passenger by that coach who came into the room; he was a middle-aged man, rather stout, he thinks rather a light-complexioned man, but he cannot be sure; knows that he was rather a stout man (a description of the appearance of Mr. Cooper, who was not present at the examination). The witness says that he does not know that he should know the passenger again if he saw him, he sees so many. He further states that there are two waiters at the Roebuck, but that the other does not attend upon that room. In considering attentively the evidence with reference to Mr. Cooper's statement, we have no hesitation in declaring that we wholly disbelieve his story. We are willing to believe that Mr. Cooper has been

been mistaken, and that he did not intend in his evidence to deviate from the truth; but we consider his testimony to have been satisfactorily met by other evidence and disproved. Mr. Cooper's evidence stands wholly unsupported, and is positively contradicted in all that is material to the point of inquiry. His conduct on his journey from Dudley to London; his silence on his first arrival in London, even to persons the most nearly connected with him; his inaccuracy as to his communications when they did take place; and, indeed, all the circumstances of his conduct throughout, would leave the case in impenetrable mystery if his evidence were to be relied upon. On the other hand, the connected story told by the other witnesses disperses all mystery, and leads us to conclude, as we have concluded, that the fire was accidental, was caused as we have related it, and was wholly attributable to carelessness and negligence. Indeed, it would be very difficult to point out a case of fire which could be more clearly traced than this has been to its cause, without suspicion of evil design.

All which is humbly submitted to Your Majesty, with this further recommendation, that copies of this Report should be communicated to the Lord Deputy Great Chamberlain of England and to the Board of Works.

(signed) DUNCANNON.
WM L. BATHURST.

MINUTES OF EVIDENCE

In the Matter of the late FIRE at the HOUSES of LORDS and COMMONS, taken before The LORDS of HIS MAJESTY'S Most Honourable PRIVY COUNCIL.

Monday, 20th October 1834.

Mr. *William Barron*, of No. 45, St. Martin's-lane, builder, was called in; and having been sworn, was Examined as follows:

YOU are a builder?—I am.

Have you a foreman who lately went into Warwickshire?—A master founder, with whom I do business, went into Warwickshire on Thursday morning.

Where did he go to, to Dudley?—Yes; he went first to Birmingham, and from thence to Dudley.

At what time did he leave town on Thursday morning?—At seven o'clock, by the Tally-ho coach.

You will only tell us what he told you, what you know from his information; did you know, of his own information, that he left on Thursday morning at seven o'clock?—No.

When had you last seen him before he went?—On the day previous, on the Wednesday morning.

When did you next see him?—This morning.

Had you seen him between Wednesday morning and this morning?—Yes, I had seen him on Saturday night.

He returned on Saturday night?—On Saturday morning, about seven o'clock.

What did he tell you?—It was not then that he told me; I saw him this morning, and went down to an appointment we had together, and then he told me.

Had you no conversation between Saturday morning and this morning?—No. As we were walking together this morning, he said I will tell you a curious circumstance of a kind of what I might say demonology, was his expression, and it struck me as peculiarly strange. I, as you know, sir, went down on Thursday morning on business; I got to Birmingham at a little after seven, at the time the coach came in; we waited till the second coach came in, then I took the coach on to Dudley, and I got into Dudley about ten minutes before ten; I immediately ordered my tea, and between the time of my ordering my tea and my taking it, which could not have taken from a quarter to twenty minutes past ten, a man came into the commercial room at the Bush Inn, at Dudley, and stated that the House of Lords was burned to the ground, and he remarked to me what a singular thing it was that there be no telegraphic communication, I believe, by way of Birmingham, how the news could have reached them so soon, considering the fire took place I believe only at seven.

Did he say that when there were other people in the room?—There were six other people in the room I understood, some at supper previous to going to bed.

Did he say that the man was known to him?—No, he said he was not; that he was a rider who came in.

A commercial traveller?—Yes.

Did he tell you whether any conversation arose in the room in consequence of this statement of the traveller?—No, he said nothing further.

Where is this man?—I have asked him to meet me here at half-past one.

Did your man know so as to remember the names of any persons in the room?—I cannot say.

How long have you known him?—He has done business for me these seven or eight years.

Have you any objection to mention his name?—No, not at all; Mr. Cooper, of the firm of Cooper & Hall, of Drury-lane.

He is a respectable man?—Yes, he is, quite so.

Are you sure that was on Saturday morning he returned?—It was on Saturday morning, he returned by mail on Friday night.

He must have left Birmingham on Friday night?—Yes.

Is he a sober man?—Perfectly so; a man with a large family, a very honest industrious man.

A man of great veracity?—Perfectly so.

A man of sound mind?—Yes.

Has he been accustomed to read books on demonology or witchcraft?—No, I believe not; but he mentioned a curious coincidence; he said, when he was last at Birmingham, he heard on the same night that one of his men had died of the cholera, and he came to

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Birmingham only from town in the morning, leaving the man quite well; he said it is a strange thing that the next thing I hear at Birmingham is of this fire having happened within three hours.

Did this information of his man having died of the cholera appear to you to have come in the natural way?—Yes; a Dudley man also, a traveller told him; that man went down by another coach.

It was by natural means?—Yes, decidedly; I do not think there is any thing wrong in his intellect.

The death by cholera was accounted for by natural means?—Yes, decidedly so.

There was means for the information of the man dying of the cholera, getting down at the time he heard it?—Yes; the man went down by another coach in the morning; they both arrived at the same time.

[*The Witness was directed to withdraw.*]

Alexander Milne, Esquire, was called in; and having been sworn, was Examined as follows:

Alex. Milne, Esq.

YOU were formerly Secretary of the Woods and Forests, and are now one of the Commissioners?—I am.

Did you receive any orders respecting destroying the tallies and foils from the Treasury?—I did.

When?—On the 8th of this month.

To destroy those tallies and foils?—Yes; and to give up the building in which they were deposited, for the purpose of its being fitted up as a temporary Court of Bankruptcy.

Have you that order?—I have the minute of the Treasury, it is dated the 7th of October.

[*The same was read as follows:*]

"Write to the late Deputy Chamberlains of the Exchequer, and convey to them my Lords authority to destroy the foils which remain in the present Tally Office of the Exchequer, which my Lords understand to be entirely useless, and to deliver up to the officers of the Woods and Forests the Tally Office, and the other rooms alluded to in a letter from Mr. Milne, one of the Deputy Chamberlains to this Board, of the 16th ultimo, in order that they may be prepared for the temporary accommodation of the Bankruptcy Court."

Are you aware whether tallies and foils have been in the use of being destroyed before this?—They have.

Where used they to be destroyed, and in what way?—They used to be broken up in the office, and used as fire-wood before the office was abolished.

That was considered as destroying them?—Yes.

On receiving that order, what course did you take?—I desired Mr. Phipps, the Assistant-Surveyor of Works, to meet me for the purpose of delivering over to him the building, and pointing out to him the tallies and foils which might be destroyed.

Did he meet you?—Yes, he did; and also Mr. Weobley the Clerk of the Works under Mr. Phipps.

Did you then give any directions?—I pointed out to Mr. Phipps the tallies and foils that were to be destroyed, and some that were to be left, that I thought might perhaps be wanted.

Those were put on one side?—Yes; and I said, pointing to a very large chimney-piece at the further end of the building where they have been destroyed, when the office was in use, do not burn them there, you must be very careful, as this is a building entirely of wood and plaster. His answer was, I intend to take them out into the yard and burn them.

What yard did he allude to?—A yard between the building and the bank of the river

Had they ever been destroyed before in that yard?—Not to my knowledge.

They have been burned occasionally in the chimney?—Yes, but used as fire wood principally.

Are you aware of their ever having been destroyed in any other place than those two you have mentioned?—No.

Was it the practice to destroy them yearly?—No, only as they accumulated.

They are very dry and parched wood?—Yes.

They might be sold for faggots and chips, when they are cut up?—Yes.

Were they most frequently destroyed by being cut up for fire wood, or burned in that chimney?—I can hardly say they were burned in that chimney; they were used as fire wood.

They were not burned for the purpose of being destroyed?—No, they were not.

Did you when you pointed out those which were to be kept, and those to be burned, separate them?—Yes, those to be kept were in another place.

Were those to be destroyed bulky, did they form a great mass of wood?—As nearly as I can calculate little short of two cart loads.

One horse cart loads?—Yes.

Were they tied together by any strings?—No, they were not.

Could they have been easily taken into the yard and burned at once?—Yes.

Could they have been burned in half an hour?—No, it wonld have taken perhaps a couple of hours.

Was that all you said to Mr. Phipps and Mr. Weobley?—Yes.

Did they make any observation?—No.

Did

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Did you give any other direction as to burning them?—No.

That if they burned them not in the yard but in the chimney they must take great care because the building was entirely of wood and plaster?—Yes.

Did they make an observation showing that they heard and understood it?—The answer was that they meant to take them out and burn them in the yard.

That was after you spoke about the chimney?—Yes.

Mr. Weobley made no other observation?—No.

Did you leave them there?—Yes.

Had you any other communication before the time of the accident?—No.

Do you know, in point of fact, where they were burned?—Only as I have heard.

Were there greater or less quantities that you ordered to be burnt than usual?—They were rather more than had been burned at any other time before.

How many had you ever known burned before?—I should think they were nearly double the quantity.

There had been a longer arrear?—Yes, an arrear from 1826 to the present time.

They had been burned generally more frequently?—Yes, they had been.

And formerly not all burned at once?—No; before the office was abolished, they were burned by the office keeper as they were wanted.

Is that office in which those tallies and foils are, that in the department of the receipt of the Exchequer, or the law court of the Exchequer?—The department of the receipt of the Exchequer.

You have no doubt about it?—No.

What quantity was there?—Something short of two cart loads.

Had you the least notion that the furnaces in which those tallies were ultimately burned could be selected for that purpose?—Not the least.

Do you know who had the keys of the furnaces belonging to the House of Lords?—Mr. Cox, I believe.

Who is he?—The clerk of the furniture belonging to the Woods and Forests; he is here.

[*The Witness was directed to withdraw.*]

Mr. *John Phipps*, was called in; and having been sworn, was Examined as follows:

Mr. *John Phipps*.

WHAT are you?—I am an assistant surveyor of works and buildings under the department of Woods.

Did you meet Mr. Milne by appointment at the Exchequer on Tuesday morning last?—I did.

At what time?—I should think somewhere about twelve o'clock.

Was Mr. Weobley there?—He was not.

Did he join you afterwards?—Not till the afternoon.

Did you meet Mr. Weobley the second time?—No.

Were you, and Mr. Weobley and Mr. Milne never together in that morning?—No.

When you and Mr. Milne met together in the morning, was it an appointment made by Mr. Milne?—Yes.

What directions did Mr. Milne give you?—I received directions from Mr. Milne to clear out the tallies from the old Tally Office, and to burn them in the Exchequer yard or some other convenient place.

Did Mr. Milne distinguish between the two sets of tallies and foils, one to be destroyed and the other not?—Yes.

Pointing out which were and which were not to be destroyed?—Yes.

About what quantity was to be destroyed?—As near as I can tell, two one-horse cart loads.

Had you ever seen any other tallies and foils destroyed before?—No.

How long have you been in the department?—I have been in the department of the Woods about two years and a half, and in the department of Works about 15 years.

Was any thing said by Mr. Milne about the chimney in this room or about the burning of the tallies in that chimney?—No.

Recollect yourself; did not Mr. Milne say to you, "If you burn them in that chimney take care, for the building is made of lath and plaster"?—Not to the best of my recollection.

Did you see the large fire-place in the room?—Yes.

Was nothing said that called your attention to that fire-place?—Nothing.

Was anything said about the yard?—From Mr. Milne.

You are sure it was Mr. Milne mentioned the yard?—Yes.

Are you equally sure Mr. Weobley was not present when you and Mr. Milne had any part of this conversation?—He was not.

Did you ever see Mr. Milne and Mr. Weobley together since Tuesday?—Not to the best of my recollection.

Neither before nor since Tuesday?—No.

Did Mr. Milne give any other direction than you have mentioned?—He gave me directions to have the tallies dusted that were to be saved, and to be put into a closet adjoining the Talley Office.

When did you last see Mr. Milne after that morning?—I do not think I saw him during the rest of the day.

When did you see Mr. Weobley?—I saw Mr. Weobley the same afternoon.

At what time?—I think about half-past three o'clock.

At what place?—I sent for him to the Office of Woods, saying I wished to see him.

Did

Mr. *John Phipps.*

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Did you not see him at the Exchequer Office?—I then took him to the Exchequer Office.

The same room where you had been with Mr. Milne in the morning?—Yes.

Were the tallies there in the same room?—Yes.

The two sets?—Yes, they had not been touched.

What passed between you and Mr. Weobley?—I told him I had received directions for burning those tallies, and I pointed out to him which were to be saved, and which to be burned.

Did you tell Mr. Weobley what were the directions you had received?—Only that they were to be burned.

But where?—In the Exchequer yard.

Tell us what you told Mr. Weobley?—I told him to burn them in the Exchequer yard.

Did you tell him what Mr. Milne had told you?—I told him only they were to be burned in the first instance.

You did not tell him that they were to be burned in the yard or some other convenient place?—I am not sure that I made use of the term some convenient place, but in the yard.

When did you tell him that?—On that afternoon.

You said first you did not say that Mr. Milne had directed them to be burned in the yard or some convenient place?—I think to the best of my recollection, but I will not be quite positive, that I did tell him what Mr. Milne had told me.

Did you tell Mr. Weobley that he had directed them to be burned in the yard?—I think I did.

Did you tell Mr. Weobley that he had directed them to be burned in a convenient place?—I think not.

Did you say any thing to Mr. Weobley about the fire-place?—No.

Did any conversation take place about the fire-place?—No.

Did you say any thing to him about the building being of lath and plaster?—No.

Nor he to you?—No.

What answer did Mr. Weobley make to you?—To the best of my recollection Mr. Weobley said the order should be obeyed.

Did Mr. Weobley suggest any place for burning them?—I think, to the best of my recollection, the next day.

Did he say any thing on the first day?—No.

Was any thing said about the yard by Mr. Weobley?—No.

Was any thing said by you about the yard?—Yes.

What did he say about the yard?—He said he thought that would be a convenient place.

Did Mr. Weobley say any thing to you when you said any thing to him about a convenient place for burning them?—No.

Did you say any thing to him about a convenient place?—I do not recollect that I did.

You did not see Mr. Milne again before you saw Mr. Weobley the second time?—I think not.

Where did you see Mr. Weobley the second time, was it at the same place?—No, not in the Exchequer Buildings; I think it was somewhere in Westminster.

Was any body by when you saw him?—Not to the best of my recollection.

Are you sure Mr. Milne was not there?—Quite positive.

What passed then when you saw him?—I saw Mr. Weobley on the Wednesday, and he suggested to me——

Which began first?—Mr. Weobley; he suggested to me the burning the tallies in the furnaces under the House of Lords, and I knowing Mr. Weobley to be a very careful man, and conceiving that he would superintend the removal and the burning of the tallies himself, I certainly acquiesced in his suggestion.

When he suggested that, had you said anything about the place where they should be burnt, on the Wednesday morning?—Not to the best of my recollection.

Did he make the observation in answer to any thing you said?—No.

Did you not begin, "Where do you mean to burn the tallies?"—No, I think not; he began with me.

Did he call upon you?—I think not.

Did you call upon him?—No; I think I met him by accident.

Did you, at the time when you met him by accident make any observation in answer to that?—No, I said nothing at all.

Were you aware at the time that the flues were wanted to be heated; that any use was wanted to be made of them?—No.

Did you understand Mr. Weobley to mean, that he took the flues as a convenient place to burn the two cart loads of tallies?—He considered it both a convenient and a fit place.

It did not strike you that it would have been as safe to have burnt them in the middle of Palace Yard?—It did not strike me.

Did you ever know flues used for burning two cart loads of timber for destruction when not required for heating?—No, I cannot say that I did.

He is your inferior officer?—Yes, he is.

He was acting under your directions, through Mr. Milne directing you and you directing Mr. Weobley?—Yes.

And would have done what you directed?—Yes.

Did it not, when he told you this, occur to you, that though it might be a very fit thing to put wood into flues to heat a furnace and heat a place, it would be a very odd thing to put these into a flue to destroy them?—I had considered Mr. Weobley a careful man, and considered that he would see to the burning of those things himself; and if they were burnt in small quantities, I am still of opinion no damage could have happened.

It did not strike you, that there was no occasion for burning them in any quantities in flue?—No, it did not.

Did you ask him whether that was the usual place for burning tallies?—No.

Mr. Weobley had assisted in the destruction of the tallies before, probably?—I believe not.

You had not?—No, never.

Did you ever see the flues in which they were to be burnt?—No; I have seen the furnaces, but not the flues.

So that, for any thing you know to the contrary, the flues might be the size of your arm, or they might be the size of your body?—I know something about the size of the flues, having been concerned in the department for some length of time; and I always understood they were brick flues.

Did you not know any thing about the size of the flues when Mr. Weobley said this?—No.

For any thing you know, Mr. Weobley might be going to burn them in a very small flue?—He might.

Were you sure they were not iron flues?—I was always given to understand they were brick flues; but I never saw them.

You did not ask Mr. Weobley any questions about them?—No.

Who has the keys of these flues?—I think some person connected with the House of Lords.

From whom were you to get the key?—That I cannot say.

Who was to assist him in burning them?—The labourers connected with the department.

You mean to represent that you devolved that part on Mr. Weobley, confiding in his care; do you know he had no experience in that operation?—I do.

You had never seen the tallies destroyed before?—No.

And you knew on Wednesday last, that Mr. Weobley knew nothing more about it than you; he had never assisted in the destruction?—No.

You saw the quantity of tallies that were to be burnt?—I did.

What quantity was there?—I should think about two cart loads.

Mr. Milne is your superior?—Yes, he is.

When you told Mr. Weobley that Mr. Milne had told you they should be burnt in the yard, you did not mention to him the yard or any other convenient place?—Not to the best of my recollection.

When you met Mr. Weobley, and found he did not mean to burn them in the yard, but in the flues which have been mentioned, it did not occur to you to ask him why he had changed your order, and Mr. Milne's order, and substitute the flue?—It did not.

At the time that Mr. Weobley told you he intended to burn them in the flues, did it strike you that he was running counter to the positive direction of Mr. Milne?—No.

Are you sure that you told Mr. Weobley, your inferior, he was to burn them in the yard, and no where else?—I certainly told him, in the first instance, he was to burn them in the yard.

Did you ever afterwards tell him he might burn them in the yard, or any other convenient place?—Not to the best of my recollection.

Then, when he said he was going to burn them in the flues, were you not aware that he was going counter to the orders he had received; did not that strike you?—It did.

What observation did you make in consequence of that?—I made no observation, for this reason; I knew that there were considerable fires kept up in those flues during the sittings of Parliament, and that was one reason why I could see no impropriety in burning the tallies there, if they were burnt in small quantities.

Do you mean to represent, that it passed through your mind that the flues were as good a place to burn the tallies in as the yard, Mr. Milne having mentioned the yard and not the flues?—I almost considered it as fit a place.

Did you not consider, at the time you are speaking of, that the flues were not the place Mr. Milne had told you to burn them in, but the yard?—I did not consider that at the time.

Had you not at that time a distinct recollection that Mr. Milne had told you to burn them in the yard, and had not mentioned any other place?—It did not strike me at the moment.

Supposing any other order were given by you to Mr Weobley, that he, without assigning any reason, met you, and said, "I am going to do something different from and contrary to what you have told me," should you in that case have made no observation?—Certainly, I should.

Then why did not you make an observation in this instance?—Because I considered the furnaces a safe place to burn the tallies in.

Though you had never seen the furnaces?—I had seen the furnaces, but not the flues.

How lately had you seen the furnaces?—Within the last six months.

When you get an order from your superior to give to your inferior, and he states that he means to do something contrary, do you not conceive yourself bound to go and report that to your superior?—Certainly.

Why did you not do so in this instance?—I can only say, that I considered this as fit a place as the other.

Who appointed Mr. Weobley?—The Commissioners of Woods.

You say you would have considered it safe to burn those tallies in the flues in small quantities, did you give any directions to Mr. Weobley to burn them in small quantities?—I did not, because I have always known him to be a very careful man.

Mr. *John Phipps.*

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You are aware that Mr. Weobley had seen as little about burning the tallies as you had done?—I believe so.

You knew that at the time?—I believe not.

Did you not know last Wednesday that Mr. Weobley had never seen tallies burned?—No, I did not; I only suppose so now.

You did not believe on Wednesday that he had seen tallies burned on any former occasion?—No.

Do your duties lead you to be practically acquainted with the subject on which you are being examined?—Yes.

You do not consider that you departed from the instructions of Mr. Milne to inspect yourself the carrying of this burning of tallies into operation, to see that no mischief occurred?—My department is so wide, and the time employed in my duties beyond the official hours so much, that I am obliged to leave the carrying into effect the orders I give to the clerks of the works to do them.

On all occasions?—No, not on all occasions.

What do you consider your duty as inspector to be?—To go round and see that the clerk of the works carries my orders properly into execution.

When you find that he is not carrying properly your orders into execution, what do you do?—Then I report him to my superior officer.

Then when you found he was going to burn them in a flue you knew nothing about, Mr. Milne having mentioned the yard, why did not you report that?—Because I thought there was safety there.

Then you take upon yourself, when you receive orders, to judge whether they shall be carried into execution according to the letter of them?—I did in this particular case.

Then you took the whole of the responsibility of this upon yourself?—I did.

You do not consider that any other person was responsible for this change of instruction but yourself?—Certainly not.

Who appointed you to your present situation?—My Lord Duncannon.

Where had you been before?—At the Office of Works, I was appointed by Sir Benjamin Stephenson; I have been so between seventeen and eighteen years altogether.

What are your hours of attendance?—Sometimes from eight o'clock in the morning till eleven and twelve o'clock at night.

How many days in a week?—I should think, upon the average, perhaps, three days in a week; but always in the summer time, from six in the morning till four in the afternoon, every day in the week; and when necessary, on the Sunday, if business requires it.

[*The Witness was directed to withdraw.*]

Mr. *Richard Weobley* was called in; and having been sworn, was Examined as follows:

Mr. *R. Weobley.*

WHAT office do you hold in the department?—I am clerk of the works.

Are you immediately under Mr. Phipps?—Yes.

You receive your orders from him?—Yes.

Do you remember being with Mr. Milne and Mr. Phipps at the Exchequer Office on Tuesday morning last?—I do.

Were Mr. Milne and Mr. Phipps both together?—They were.

All three in the room?—I believe it was on Tuesday morning we were all together.

Were you in the room with the tallies?—Yes.

Do you recollect being with Mr. Phipps in the morning, or at any time of the day?—It was in the fore part of the day.

Did you attend there in consequence of an order given you so to attend?—I did; I attended on him, being my superior officer.

Who gave you the order to attend?—Mr. Phipps.

Had you any communication with Mr. Milne before you saw him in the Exchequer Office?—No.

Do you know Mr. Milne, personally?—I do.

Have you known him long?—I have.

Were you and Mr. Phipps and Mr. Milne together in the tally room at any time within the last few days?—I think not.

Were you and Mr. Phipps together in that tally room without Mr. Milne?—I was.

Was it the evening of that day, Tuesday, or the evening of the same day on which you had been with Mr. Phipps and Mr. Milne?—It was.

Was it in the evening of that day, Tuesday, or the evening of the same day on which you had been with Mr. Phipps and Mr. Milne?—Yes, I had been with Mr. Phipps the same day; but I do not recollect being in the room.

Do you recollect being oftener than once in that room?—I really cannot speak to that, I may or may not.

What did Mr. Milne say upon the subject of the tallies?—I do not recollect that he said any thing upon the subject of the tallies.

Did you hear him speak at all upon any subject?—No, I do not think I did.

Did he say any thing about the great fire-place in the room?—Not then.

At any time?—We noticed it to be a very handsome, antique thing.

Did he say any thing more about the fire-place?—No, I think not.

Did he say any thing about the building being of lath-and-plaster and wood?—I think he did

Did he say any thing about its being a place easily burned?—I do not recollect that there was any thing said about easily burning.

Was there any thing said about burning the tallies in the yard?—By Mr. Phipps there was, and he told me it was by Mr. Milne's order.

Did he tell you it was by Mr. Milne's order in Mr. Milne's presence?—He did not.

It was not the first time you saw Mr. Phipps he told you that about the tallies?—No.

State what passed between you and Mr. Milne and Mr. Phipps when you were all three together in the tally-room?—I was to clear the shelves.

Who said that?—Mr. Phipps and Mr. Milne together, that there was an order to clear the shelves.

If Mr. Milne was by and along with Mr. Phipps it was not likely he would say he had an order to clear the shelves?—That was when Mr. Phipps was there with me.

Recollect what passed when you three were in the tally-room all together, had you any conversation with Mr. Milne himself on the subject of the tallies?—Never at no time.

Did you hear Mr. Milne say any thing that you recollect in the tally-room?—Not with Mr. Phipps.

Did you hear him say any thing in the tally-room without Mr. Phipps?—I did not.

Had you any conversation with Mr. Milne within the last fortnight in any place?—None.

Have you ever talked to him on any subject?—Oh, yes, I have on different subjects.

Within the last fortnight?—I do not recollect that I have.

Have you heard him speak on any subject within the last fortnight?—Yes, I have been with Mr. Seward and Mr. Milne a good deal.

Where?—In this same tally-chamber.

How long ago?—I think within a fortnight.

Was that before the fire?—Yes.

Was it before the day that Mr. Phipps gave you orders about the tallies?—Yes.

You have no recollection of Mr. Milne having opened his mouth on any subject on the morning on which you received the order about the tallies?—I do not recollect that he did.

Did Mr. Phipps say any thing to you?—They were stripping the room, and pulling down for other purposes.

Are you sure he said that while Mr. Milne was present?—I think he did.

Did he tell you it was by Mr. Milne's orders?—Yes, he said Mr. Milne had spoken to him to do so.

Did he say that in Mr. Milne's presence?—I think he did.

And Mr. Milne said nothing?—No, I think not; they were in the tally-chamber, and I went to them; therefore their conversation had taken place before I came, and Mr. Phipps repeated to me what they had been talking about.

You found them there?—Yes.

After you went there you have no recollection of Mr. Milne's saying any thing?—No.

What did Mr. Phipps tell you?—Mr. Phipps told me a day or two after.

A day or two after you saw them together?—Yes.

Where did he tell you this?—In the Exchequer yard, I think.

Not in the tally-room?—No; that it was the desire of Mr. Milne that those quantities of tallies, this, and this and this, pointing them out, should dusted and put in the closet for his inspection.

Was he in the tally-room when he told you this, or in the yard?—I think it was in the yard.

How could he point out the tallies if he was in the yard?—Oh, dear no, he could not; he took me up there; we met in the yard, and he took me there and showed me those.

Mr. Milne was not there then?—No, he was not; he showed me those that were to be put in a room, and that the rest were to be destroyed, and to take care they were destroyed.

Did he say where they were to be destroyed?—He did not; he said Mr. Milne had ordered them to be burned in the Exchequer yard; I told him we could not do that, we should alarm the neighbourhood; he said, "you may do it where you can, you must think of some place," and it struck me the stoves in the House of Lords would be a very safe and proper place to do it.

Are you sure that when Mr. Phipps told you they might be burned in the yard, he said that was by Mr. Milne's order?—He did.

Did he say Mr. Milne directs they shall be burned in the Exchequer yard?—I do not know that he said they were to be burned in the yard, but that they might be burned in the yard; and we were in the Exchequer yard at the time when we talked of where they were to be burned.

You first had the conversation in the tally-room, when he spoke to you about this and that parcel?—Yes.

Did you go into the yard and continue the conversation?—We did continue our conversation as we went along.

Was it in the yard or the room he told you where they were to be burned?—I think that was in the yard.

Are you sure it was not in the room?—I really cannot say.

Did he say to you, Mr. Milne desires these shall be burned in the yard?—He said Mr. Milne had proposed their being burned in the yard.

Did he communicate that to you as a direction to you to burn them in the yard?—He did, till I told him that we must not do it.

Are you sure you made that answer, the moment he spoke of their being burned in the yard?—I am sure I did.

Mr. *R. Weobley.*

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Did you ever see tallies burnt before?—No.

Or destroyed in any way?—No, never.

This conversation took place two or three days after you had met Mr. Milne and Mr. Phipps in the tally-room?—I doubt whether it was not on the day the place was cleared.

Carry back your recollection to the time when you saw Mr. Milne and Mr. Phipps in the tally-room; you say you went to them by appointment?—No, it was very natural for me to meet them.

You say you were desired to go there, and went and found them; the two together?—Yes, I did.

What did either of them say when you went in?—He was pointing out that I was to strip those shelves all round.

Who did this?—Mr. Phipps.

Mr. Milne being by?—Yes.

What did you say?—I said it should be done as soon as possible.

Did he mention the tallies at that time?—I cannot recollect that he did at that time.

You have no recollection of any thing being said about the tallies to you in the presence of Mr. Milne, but only when you two were together?—I am certain sure they were mentioned, and at that time when they were both with me.

Did you suggest burning them in the flues?—I did.

The House of Lords' flues?—I did.

What did he say?—He said he thought it a very good place.

Did you say that it was a very good place?—Yes.

What did he say?—I am not sure that he said that was a very good place himself, in those words.

What you are going to say is very important, and implicates others as well as yourself, therefore be collected, and do not answer till you understand the question. When you proposed to Mr. Phipps they should be burnt in the flues and not in the yard, he, not having said any thing about the flues, what were the words which Mr. Phipps used, as nearly as you can recollect?—He said a very good plan; that is to the best of my knowledge.

Were you going to add any thing?—It was not at the time he gave directions to burn the tallies, and when I said we cannot burn them in the yard that I proposed this; but that occurred to me afterwards; when I met Mr. Phipps next morning, I said we have taken the tallies to the House of Lords and they are burning them in the stove there, and he said a very good plan.

When you and Mr. Phipps were together, either in the tally-room or the yard, and Mr. Phipps told you they were to be burnt in the yard, what did you answer at that time?—I think I told him that we must not burn them there.

Did you give him any reason?—Yes, because I thought we should alarm the neighbourhood, and be interfered with.

What did he say?—He said that we must think of some other place.

Did you then propose the flues?—No, not that day; but the next day his proposition was, I must think of something.

Did you then separate?—Yes, we did.

When you had the next conversation it was not in the tally-room, but somewhere where you met him?—Yes, in Palace-yard; I met him by chance.

Did you begin the conversation or he begin the conversation?—I began the conversation. I told him I had got down the shelves for Mr. Milne's inspection, and that I was taking the tallies to the House of Lords to burn, and he said a very good plan.

Did he say any thing more?—Not to my recollection.

Did you say any thing more?—Not to my recollection.

Had you any further communication with Mr. Phipps before the burning?—Not to my recollection.

Had you with Mr. Milne?—No.

You say you never saw tallies burned before?—No.

Had any one told you where they used to be burned?—No.

You knew nothing on the subject?—No.

Did you know the flues of the stoves?—I have seen them externally; I have had them opened at the holes.

Did you know how large they were in the bore?—No, I do not know that I have seen them opened sufficiently to measure that.

Did you ever hear of flues being used for the purpose of destroying wood or other combustible materials before?—Yes, I have, at Somerset House.

Flues are used for the purpose of carrying off smoke, or carrying heated air, but suppose you did not want to heat the place, but only wanted to destroy wood or paper, have you ever known of flues being used for that purpose?—Never; paper I have, but not tallies; we always object to burning paper in flues, because it runs right up the chimney.

You have known paper burned in that way?—Yes, they have tried in Somerset House to make the flues burn their papers, but it always has that undesirable effect, that the sharpness of the draught drives the paper up the flues when part is unburned.

Is it customary in Somerset House to apply the flues to that purpose?—We had a large machine, before King's College was built, to burn them without a flue, since that was built, we have tried a variety of places to burn them.

Did it never occur to you they might be burned in an open space, by making a bonfire?—

No,

Mr. *R. Weobley.*

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No, they put on such very large quantities; when they come to take waggon loads it would make a great blaze, and that would always collect persons.

Did it never occur to yourself in Somerset House, that in doing this they might burn the flues red-hot?—I should think not; it never struck me.

Is not that the effect of burning combustible materials in iron flues?—Those are brick flues.

Might not they heat bricks so as to make the beams behind them burn?—An immense heat would, but I should think any quantity of paper or tallies would never produce that.

Have you never known of timber of any kind or wood being destroyed by flues before?—No, I do not know that I have; I have known where there has been dry-rot, and very bad wood, which would inoculate other, and I have taken the pains of burning that as near the place as possible.

Where did you burn it?—In the fire-place where this wood was found to have the dry-rot, when the wood was pulled down I have thought it desirable to burn it as near as possible.

You would burn it a little at a time?—Certainly.

Just as they would use wood, to keep up a fire?—Yes.

Was that the way in which those tallies were burnt?—Yes, precisely.

Did you superintend the operation yourself?—Yes.

Whom did you employ to do it?—The labourers we have.

When you told Mr. Phipps you meant to burn them in the flues, and he said, "A very good plan," did he say any thing as to the necessity of burning with care a little at a time?—No, he did not; I dare say Mr. Phipps was perfectly satisfied that my care was sufficient for this, and that I should proceed with caution.

State the names of the men you employed?—Cross.

Any other?—Furlong.

Any other?—No other.

How long would it have taken to have burnt those tallies and foils in the open air?—I am sure I cannot say; being such old dry sticks, it would have been a very short time, with a great blaze.

Would not an hour, or an hour and a half have done this?—I dare say it would.

Did it not strike you, that for expedition it would be better to burn them in the open air, than in a flue where it would take twelve hours?—Unless we had a very large open space, away from houses, I think the police would have stopped it.

Did not another thing strike you, having them cut up in short pieces and used for matches?—That was forbidden; it was desired particularly to destroy them.

The tally consists not only of the timber, but what is written and marked upon it?—I conceive so.

Is it not equally a destruction to cut them into little bits, as to have destroyed them by fire?—I should think it might; but then I was ordered to destroy them.

You never suggested to Mr. Phipps, that they might be destroyed by cutting them up?—The porter who belongs to the Exchequer Office, and the clerk wished to have some of them to light the fires; I told them I should be very glad to do it as suggested; but I was ordered to destroy them.

When did he make that suggestion?—The day before I took them away.

You say those men were employed by you to burn them; did you give them any directions?—Yes.

What were those directions?—To burn them very cautiously, by putting on a few at a time.

Are you sure you gave that direction to each of them?—Quite certain of it again and again.

Did you see them before the operation?—I did.

At what time?—I went in between seven and eight in the morning.

Had they begun burning them?—Yes; about half an hour, I suppose; the fire was lit about seven o'clock.

When did you give the direction?—Over-night, and also in the morning after they had begun.

When you went to see this burning what did you find them doing?—I found them burning them.

How were they doing this?—Putting on half a dozen at a time.

Putting them into the furnace?—Yes.

Did they push them into the flue, or only into the bottom of the furnace?—It is a common furnace; the door was not shut. I think they were burnt when they put others in.

How long did you stay to see the operation?—About ten minutes or a quarter of an hour.

Was it a great fire?—It appeared a very small one.

When did you return?—About eleven o'clock.

Was the same going on then?—Yes, it was; they were doing it in the same way.

Did you give the same direction to both the men, or only one?—Both men; not together; but more particularly Cross, because he is much the oldest labourer.

Are you sure that the other was by, when you gave the direction to burn a few at a time?—Yes.

Did they make any remarks?—None. I asked Cross whether all was going on right, and he said yes.

When was that?—In the middle of the day.

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Are you sure you gave him a direction?—I said, "Cross you must be very careful, and put on a few at a time."

Was the other by?—I am not sure that he was; but they were together when they were burning them.

Were you aware that Cross was going away while the other was burning?—I intended they should be there together.

When you came back at eleven did you find the fire larger?—I should say much the same.

Were they going on putting on a few at a time?—They were.

Did they burn strong?—No, not particularly so, for dry wood.

Did it not blaze like dry wood?—Yes, it burned freely.

Did it make a great blaze in the furnace?—No.

Had you ever seen the furnace when it was applied before?—Yes.

Was it a larger blaze than you had seen before?—I do not know that I had ever seen any thing burned there; but I think I have seen the door red hot with coal.

Did it become red hot at this time?—No, not at all; it was never shut.

There was the whole draft from the open door?—Yes.

Are you not aware, that in proportion as the opening of the furnace is larger or smaller, the fire becomes more or less fierce?—Yes, I suppose it may.

Have you any doubt about that as an ordinary observation?—No, I have not.

It was never shut at all during the operation?—No.

You say that the tallies were put on by handsfull; did you see what sized handsful were put on at a time?—I should say half a dozen sticks.

If there were only half a dozen sticks burning in the bottom of a furnace, what was the size of the furnace?—About a foot square.

The furnace itself is certainly larger?—I mean the flue.

The question refers to the furnace?—I should say a foot; 10 by 13, or 12 by 14.

The question refers to the furnace where you put the wood?—I should say a foot.

Do you mean to say that you saw them put the handsful of tallies at the time into the bottom of the furnace, not into the flue?—Yes, where they put the coals.

Did they never put in a second handful till the first was destroyed?—Certainly not when I was there.

Then there must have been a very small fire?—Yes.

Will you swear the fire was not so large that it filled up the whole space of the furnace?—Yes.

How deep is the furnace?—From two to three feet.

How many inches deep was the fire?—There was a handful of sticks lying on the bottom.

Three or four inches high?—Yes.

Do you mean to say it was never more than four inches high?—I think not.

Never half a foot?—No.

You are sure it was never higher than six inches?—It was never so high when I saw it, I think it might be four inches.

Four inches of solid material burning, and then there was a blaze at the end?—Yes, at the end of them.

It was the smallest fire you had ever seen in that furnace by much?—I never saw a fire but a coal fire when I happened to pass.

When you have seen the door red-hot, have you ever seen so small a fire in that furnace before?—I am sure I cannot say; I have seen very large coal fires.

Have you ever seen so small a fire as this with coal?—I may when it was burned down perhaps.

Did you leave any instructions to be careful, and put on a few at a time?—I did.

When did you return?—Between three and four.

Did you find the same thing going on then?—Just the same.

Did you put your hand by accident on the furnace?—I considered the thing as cool as it was usually.

Did you try it?—No.

Did you spit upon it?—No.

Was the fire as low as it ought to be?—Yes, much the same; one charge was nearly out before another was put in.

Had they done any thing with the ashes?—They drew the ashes out.

On the stone?—On the stone and bricks; it is entirely bricks all over the place.

When did you return after that?—Not any time after three or four.

How long were they at the work?—They were nearly burned out then; they had very few more to burn.

When did you see the man afterwards, did you see him that night again?—No, I did not.

You never went back after three o'clock?—No.

When did you see Mr. Phipps afterwards?—I did not see him till I saw him at the fire.

Nor Mr. Milne?—No.

Do you know how long it took to burn them?—I considered that it took ten hours.

Do you know how long it took?—From 10 o'clock till between 4 and 5.

Did the men make a report to you when they had done the burning?—No.

You say at three there were but few remaining, did you see those which remained?—Yes, but I wanted more to see that they were not made off with, than that they were destroyed.

Did you see the tallies at that time?—I did a few, and I picked them up together.

How do you know, as you did not see those men after that, that the handful of tallies that you mentioned as remaining at three o'clock, were destroyed, your duty and your orders being to destroy the whole, and your going there to see them?—From the confidence I had in the men.

Are they common day-labourers?—One has been there before I was there, the other has served a master for seven years; the only distrust I had was, that the men would take the tallies away.

Is there a labourer in your department called labourer in trust?—No, not now.

Those were terms once used in the department?—Yes, a long while.

Did it not strike you they should have reported to you that they had finished the operation?—Perhaps they might not know where to find me, but there being few to burn, I considered that they would finish them properly, and that they would not want another job that night.

You mean to say that had nothing to do with burning the building?—It never struck me it would have that effect.

What is now your opinion?—I am very sorry to give my opinion, which may affect myself, but I am very sorry to say that it has very much the appearance of that.

When you state, that you never saw more than six of those at a time put on, the fire was never more than four inches from the base, and infinitely less than a common coal fire there?—Yes.

You suppose that could be the cause of the fire?—It appears, on consideration, that the flues and place altogether can never be of that solidity that I supposed it to be; I supposed it was the safest place that was possible, and if the flues had been solid and sound there could be no harm.

In what way do you suspect there was a flaw in the flues?—It is impossible for me to suggest that; they have been used for many years, and they might be defective.

Must it not have been an odd sort of a flue, a sort of honey-comb flue, to enable so small a fire to have any effect in a furnace three feet high and 14 or 15 inches square, having in the bottom of it a single layer of six tallies, not above three or four inches high?—I should be very willing to tell your Lordships precisely if I could; but the fact is, the quantity of tallies has been pretty well ascertained, and it took from seven in the morning, or something thereabouts, till quite five in the afternoon to burn them; if they were equally divided, we could, by squaring them, tell that.

There is no doubt of that, and that it will be found there were a great deal more than a handful put on at a time?—I am giving way to your Lordships' suggestion as to quantity.

You have sworn very distinctly, to the best of your recollection, that the men obeyed your direction, and put them on by handfuls at a time, and that they never put on one handful till the other was burned?—Not when I was there.

Then you swear, that you never saw more than about four inches in height at the bottom, with a flame over it?—Not knowingly so.

Is it your belief, that in the interval between your being there they put on greater quantities together?—I should hope not; I cannot say; but I do not see what interest these men could have to disobey my orders.

It is a suggestion, not of the question, but of your answer, that you have given a very inadequate cause for such an effect when the fire was so small?—I understood your Lordship, the size of the door, the opening where they were put in, when I said a foot square.

What depth of fire was there in the bottom of the furnace composed of wood?—I mean to say, when I saw them put in a handful at a time in this way.

Never putting on one handful till another was burned?—Or when one was nearly burned they put on another.

But there was never burning more at a time than one handful?—Not that I saw.

How high a fire would one handful at a time make?—Very little.

Three inches?—Yes, or four; I will say from three to six inches.

The furnace itself is three feet high you say, which is five or six times that?—Yes.

Then there were 30 inches above for the open space, without any fuel at all in it, and then there was the brick-work over that; what sort of brick-work must it have been that could have got red hot, to destroy the building, with that interval and that brick-work, you being a skilful person in works?—Yes, I have had the conduct of a good deal of work.

What sort of brick-work must this be?—I am sure it is impossible for me to say how the accident might occur; there might be many circumstances which were quite unknown to me; the flues might be defective, being used for some years.

What sort of defect must there be that would make it take fire, from a fire so low with such a height of stove?—It is impossible for me to account for it under any circumstances I saw.

You had seen the furnace before?—Yes.

At that time the furnace and flue were built?—Yes.

Does the flue rise perpendicularly or go aslant?—I think it cannot rise perpendicularly far.

How far is that from where it passes to the corner of the House of Lords?—I am sure I cannot say.

Have you never measured it?—No.

About how far?—It must be a rough guess.

Were not those flues just on the side of the passage which used to lead down to Mr. Ley's house?—Yes.

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Then the height before this could reach the other floor, can only be the same height with the lower rooms belonging to the House of Lords which are under the passage?—Just so.

That limits the height there?—Yes.

The furnace was three feet high, you say?—Yes.

That leaves a spring and perpendicular ascent of not less than three feet or more?—I should think at least that.

What was the height of the coffee room of the House of Lords, or the low rooms of the House of Lords in that additional building, not above nine feet?—No, they are very low; I should think they did not exceed that.

Have you never known an instance of a flue having set fire to a building at the distance of 30 feet from the fire?—Never.

Did you never hear that was the case in a newly erected church at Beverley, two years ago?—No.

Did you measure the quantity of tallies?—I did not.

Can you give an estimate how many cubic feet there were?—I cannot.

Were not they arranged against the wall when you saw them?—Yes.

How high were they?—We have ascertained by guessing ourselves that there were about as many tallies as two one-horse cart loads would contain, or one two-horse cart; now we reckon three cubic yards in a two-horse cart load.

A treble cube, in fact?—Two square yards were reckoning up to-day; I think we made about eighteen or twenty feet, but I cannot come nearer it.

What would be the length of the figure?—I should say twelve feet.

What would the breadth of it be?—I should say three feet.

What would the depth be?—We do not agree; I propose two feet, but they say one foot ten.

That would make seventy-two square feet; they must be a good deal more than that; cannot you tell what two cart-loads would be, how many cubic feet; would they not be 350 cubic feet at the least?—Much less than that.

How many cubic feet?—About thirty feet.

How long is a cart; is not a cart five feet?—No.

Four feet long?—If it is a one-horse cart; a one-horse cart is supposed to hold about a cubic yard.

How did you bring the tallies from the tally-room?—Upon a mason's truck.

How many trips had you to bring them?—There might be perhaps six or eight: it is a truck that they carry heavy weighty stones on, the truck itself is heavy, but we put thereon and put it on a few at a time; I sent for a cart but could not get one, and two men took them from the Exchequer Office round the House of Lords in about an hour and a half.

Did they take them the night before, or that morning?—The night before.

Are the men here that brought them?—One of them is here.

You think they had seven or eight trips?—Yes, I think they had.

Cannot you say how many they took each time?—No I cannot, as it was mentioned when they were there that there would be two cart-loads, that is the nearest description I can give you.

When you speak of a cart-load, do you mean any definite portion of size, or as much as a single horse could draw?—I meant a one-horse cart-load, and we considered we should take them at twice.

Whom did you get the key of the furnace from?—We are always accessible to that place; the general workmen have always access to that place.

From whom did you get the key?—I always carry one.

From whom did you get that?—I had it from the labourer in trust; the workmen have keys.

How many keys are there enabling them to go to that furnace; three?—I cannot say, but three times three I have no doubt.

Do you know that there are more than three?—I know there are two as well as my own among my men; the person that makes the fire has got a key; I know Mr. Bellamy's servants have keys about them; they are all general locks for fastening, but not security against the workmen.

You say you gave your orders to Cross and the other man to do it carefully, to put on a few at a time; did you give any orders to damp the tallies, so as to prevent their burning too quickly?—No.

Did you know that they were damped, in point of fact?—Not to my knowledge.

Did any person come to you while the operation was going on, to warn you that danger might happen?—No.

You are sure of that?—Quite sure.

Was there any smoke in the passage during any time you were there?—No.

Did Cross ever tell you any body had given him such notice?—No.

Did the men tell you they had had any communication from Mrs. Wright or any person?—No.

When did you first hear that Mrs. Wright had communicated to them?—I never heard of that at all.

Did you never hear her name mentioned in relation to that till now?—No.

Or a person of the name of Reynolds?—No person gave me the least intimation of the kind.

Did Cox tell you he had received any intimation?—No.

Was

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Was there any perceptible increase of heat during either of your visits?—No.

Neither in the place itself, or in any other part of the building?—Not the slightest.

You did not go into the House of Lords yourself?—I did not that day.

Had the flues been swept?—Not this season, it is generally done in the recess; I think they have the place opened to do that.

You knew that fact before you ordered the tallies to be burnt there?—Yes.

Do you mean that they had not been swept since the beginning of the last Session?—Yes, but it is very seldom that they get very foul.

Did you make any inquiries when the flue had been last swept before you gave the orders?—No, but I know it is swept but once every session.

How do you know that?—I give orders when it is swept, to have the openings cut.

Do you know that it had been swept within fourteen months?—Yes, it is not fourteen months ago; I should say from nine to twelve.

Has it been swept since the beginning of the last session?—No.

That you knew at the time you desired the tallies to be burnt?—Yes, I suppose it has not been swept because they send for me when they want it swept, and I give orders for it.

If there was a great collection of soot, perfectly dry, and sparks played upon it, might they not cause it to light, and so cause this mischief?—Yes; but copper furnace flues are not swept sometimes for twenty years; but it is an invariable rule to do this once a year.

Were you ever inside the House of Lords that day at all?—Not at all.

Or in the Lobby?—No.

Only in the outside of the building?—No.

Did it strike you as a prudent precaution to go to the House of Lords and see that all things were right?—If it had struck me that there was any danger, I should never have burnt them at all there.

You say there are several keys; is there any thing to prevent any person who has one of those keys introducing combustible materials into the stove?—None that I know of.

Could a boy get up the stove?—A boy gets in generally to sweep it, or a part of it.

Could a man or a boy have got in by having the key, and have got up that flue, provided there was no fire?—No, I do not suppose he could.

Could a man standing there have sent up a boy?—I should think not; the way these flues got up is by a door in the floor of the House of Lords, which we pull up, and that door is always made up very carefully, for I put on a new lock myself; when that door is opened we get down and cut the holes.

You mean to say that no person having a key outside could enter and get up?—I should think not; I do not suppose it is constructed so that that could be done.

Might not combustible materials be introduced?—There might be a draught; but we have to make openings, or a boy could not get through; we are are obliged sometimes to have a soot hole, or a man door sometimes, to let the boy pass.

Were any other men employed at work that day who might have assisted those men who were feeding the fire?—No.

Do you know a man of the name of Cox?—I know Cox, who is the manager of the furniture department.

Are you aware that a committee of the House of Lords sat upon the subject of these very chimnies and flues the last session of Parliament?—No, not at all

You are not aware that any experiment was made with reference to those flues by order of that Committee?—No.

When you have opened this flue on former occasions for the purpose of cleaning it, have you ever found it very foul with soot?—Not to my knowledge; but I have been there only two years.

How often is it swept?—It is swept every year before the session begins.

Did any body in the course of the day suggest to you that there was any danger?—No; no person living made any such suggestion to me; if any hint had been given, I should have seen about it.

Where were you when you first perceived the fire?—At the Abingdon-street corner, just where the works are going on at the enlargement of the Library of the House of Lords; the men were just going off from work, and I was just going home; it was just six.

Did you see the fire?—I saw a chimney very much a-fire, and I ran up by Mr. Bellamy's stairs, at the end of Abingdon-street, into the House of Commons, then turned round to go into the House of Lords, and I saw then under the door that it was all on fire.

Did you meet any body?—I saw Mr. Moyes, and saw Mrs. Wright.

What did you say?—I said, "Oh Lord! it is all on fire; take care, for it is all on fire; it is much more than a chimney;" I shall never forget the countenance of those persons.

What time was this?—About six o'clock; ten minutes sooner or later.

Was it dark?—It was dusk, not dark; it was dark there up in the Lobby; and I went from there up what we call Faux's staircase, on the roof, thinking we should be able to get some buckets and water, but the fire was such I could not get on the roof at all.

Do you know which chimney it was you saw the fire issue from?—No; I considered it one of Mr. Howard's chimneys.

Was not it the chimney of the flues?—I am sure I cannot say.

You are sure it was a chimney?—Yes, I know it was; it was my duty to do every thing I could, and I ran as fast as I could up to this door.

You have no doubt that the fire you first saw issued from a chimney?—Certainly not.

Not from a window?—No, certainly not.

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Was that chimney near the chimney from the flues?—About the place.

You are not sure whether it was or not?—I cannot tell the particular chimney when they were all in a stack.

You are not sure it was not that of the flues?—I am not sure of that.

Have you seen Mr. Phipps since the fire?—Yes.

Have you had any conversation with him with respect to the cause of the fire?—Yes.

You have talked about it?—Yes.

Have you reminded Mr. Phipps of the conversation which passed between him and you in Palace-yard, when you said that you would burn the tallies in the flues, and he said that was a very good plan?—Yes; I told him when I was examined before the Council before, that I had stated that he said it was a very good plan.

Did he deny that when you said that?—He did not.

What did he say?—He said that he certainly did say so.

You said you first discovered the fire about six o'clock?—Yes.

Did you immediately send round Palace-yard to the House of Commons to give information?—I gave the alarm of fire immediately.

In what way?—Crying "Fire! Fire!"

Did you send any body round to the House of Commons to acquaint the persons there that you had discovered a fire at the House of Lords?—When I cried fire, I ran down as fast as I could to Cotton-garden, to Mr. Ley's house, and up the staircase called Guy Faux's staircase; that is a way to get out to the roof; I was in hopes that I should be able to get some buckets which were there, to extinguish it, but when I got there, I found I could not get on the roof; then I came down, and the people began to assemble very fast; I went round as fast as I could, and as soon as I could find my people I desired them to go round to Mr. Speaker's house.

How soon after six o'clock was that?—I cannot say, perhaps it might be seven o'clock.

From whom did you receive your appointment as clerk of the works?—I believe from Lord Duncannon.

How long ago?—I think two years ago.

Were you employed in any other public office before that, and if so, in what capacity?—Yes, I was employed in Somerset-house as clerk of the works, or labourer in trust, as it was then called, for ten years.

That is exactly the same capacity?—Yes, our duty and our control was the same.

You thought it necessary to caution the men against putting on too much fire?—I did.

Did you think that returning to them three times in the course of the ten hours was sufficient to enforce the observance of your order in that respect?—Yes, I thought so; I went three times instead of once only, lest they should embezzle the tallies and carry them off.

You were not afraid that they would load the fire with too much wood?—Not at all; I did not consider that there was the least danger of that, but I was cautioned to take care that they were destroyed.

Your caution not to put on too much wood at a time you thought necessary?—Yes, I thought it best that they should do it in a moderate way; it is always necessary to give a caution to labourers in all sorts of work.

Still you did not think it necessary to return oftener than three times?—It is evident now that I ought, but I have not the least distrust.

Do you think it possible that a fire standing only four inches should have consumed those two cart loads of tallies in ten hours?—There were two fire-places.

Was the wood put into two furnaces or only one?—Into two furnaces.

All which you have said applies to both furnaces?—Yes.

[*The Witness was directed to withdraw.*]

Mr. *John Phipps*, was again called in; and further Examined, as follows:

Mr. *John Phipps.*

WHEN you met Mr. Weobley at the tally-room, you say Mr. Milne was not there?—He was not.

Have you ever seen him at the tally-room with Mr. Milne within the last fortnight?—Not to the best of my recollection.

You say after you had given him directions, you met him in Palace-yard, and he said he meant to do it in the flue?—Yes, that was the way.

When he said that to you, what observation did you make in reply?—To the best of my recollection I said I thought there would be no objection to it, or something to that effect.

Did you not say that it would be a very good plan?—Very likely I did.

Why did you not mention that before?—I quite forgot to mention that; I trust your Lordships will make some allowance if I have not stated every thing, for I am in a very nervous state.

When you told Mr. Weobley that Mr. Milne said they should be burnt in the yard, what objection did he make, or did he make none?—He made none, to the best of my recollection.

Are you sure he did not say it would never do to burn them in the yard, for that it would create an alarm in the neighbourhood?—No, not to the best of my recollection.

Are you sure he did not say that, and that you did not in consequence say, then we must find another place?—No.

Do you recollect coming away from that interview in which you gave your orders to Mr. Weobley in the belief that they would be burnt in the yard?—I did.

When

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When did you first think that they would not be burned in the yard?—The next day when I met him.

During the interval between your giving him your directions and your meeting him the next day, did you consider that it was settled that they should be burned in the yard?—I did.

And not in some other convenient place, according to the alternative given by Mr. Milne?—Not to the best of my recollection.

You do not know any thing probably about another department of the Board of Works, the state of repair of the fire engines in different places?—Yes, I can speak to one thing as a positive fact, that the day before, to the best of my recollection, in passing through the Horse Guards, Mr. Simmons was trying the fire engines there, and those fire engines were at the fire on the Thursday evening.

To whom did they belong?—To the Board of Works.

Are there many fire engines belonging to the Board of Works?—They have several.

Have they fire-engines elsewhere than in London?—They have fire-engines at Kensington Palace, at Somerset House, at the British Museum and at other places.

Have they fire-engines at Hampton Court Palace?—Yes.

And at Windsor Castle?—Yes.

How many fire-engines are there at Windsor Castle?—I cannot say; indeed that is out of my department.

Are you aware whether it is the fact that there is no water in the reservoir at Hampton-court, or at Windsor?—No, I am not aware of that.

Do you believe that the fire engines are all at this moment in order for service?—I believe they are; within the last two months I believe they have been repaired and tried at Hampton-court and elsewhere, and that it is the invariable rule once or twice a year, or oftener, to have an engineer to repair and try the engines, and to clean the hose.

What is the price of a good engine?—Sixty, or seventy, or eighty guineas.

[*The Witness is directed to withdraw.*]

Joshua Cross was called in; and having been sworn, is Examined as follows:

Joshua Cross.

HOW long have you been employed by the Board of Works?—I cannot say to a certainty; I should think my father was employed under the Board six and thirty years; myself twelve to fourteen years.

Are you what is called a labourer in trust, or a common workman?—I have been employed at the House of Lords some years.

Is the House of Lords your department?—Yes, I have been constantly employed these three years at the Houses of Lords and Commons.

In what capacity?—As a plumber's labourer.

Was there any plumber's work going on there on Thursday last?—No.

How long ago had there been any done?—I suppose about a fortnight ago.

There was no other work going on but burning the tallies?—No.

When did you receive your directions to burn the tallies?—On Wednesday afternoon from Mr. Weobley.

Did you receive any directions from any body but Mr. Weobley?—No.

You took your orders from him?—Yes.

Who was to do this with you?—A man of the name of Furlong was assisting me.

No one else?—No.

What directions did you receive?—To go and dust some tallies in the first place in the Exchequer Office, and then we were ordered to take the other tallies away to be burnt, and we took them and put them just within the door of the House of Lords by these flues.

You mean outside the House itself?—Yes, outside the House.

Under the arch?—Yes.

Did Mr. Weobley give you any particular directions as to the manner in which you were to burn them?—No particular directions.

Did he give you any caution?—Not any particular caution.

Did he say in what way you were to burn them?—I was to make a fire, and burn them.

Did he say in what way?—He did not say any particular way.

Did he say you were to burn them cautiously?—Certainly; that we were not to make a large fire, but to put in a few at a time.

Did he say a few at a time, or a handful at a time?—He did not say a handful; not to make a large fire.

You did not see Mr. Weobley again till the next morning?—No, not after that night.

Was your comrade with you when Mr. Weobley gave you your directions?—He was.

The next morning at what time did he begin?—Half past six.

How soon after that did Mr. Weobley come?—Between seven and eight.

Was it about half past seven?—Thereabouts.

How did you proceed to burn them?—I put in a few at a time; as many perhaps as a dozen or fourteen.

Did you heap them on above one another, or lay them flat?—I laid them flat on the fire.

How deep was the fire at any time in the morning?—I cannot say.

How deep is the furnace?—I cannot say.

Just three feet?—Not so large as that.

The question does not refer to the door, but the place where the fire is before you come to the flue?—A couple of feet, perhaps.

Joshua Cross.

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What is the breadth?—I cannot speak to that.

Is it square?—I cannot speak to that.

You did not cut the tallies, but thrust them in?—No, I parted the strings from them, and laid them in with my hand.

Did those things get to the end?—Yes.

They did not stick out?—No, all in.

Then the furnace was as long as they were?—Yes.

How wide is it; a foot?—I should think more than that.

A foot and a half?—I cannot say.

How high is it?—I do not know; it is a thing I never measured, and never had any thing to do with but that day.

About two feet?—No, I should think not so much in depth.

Twenty inches?—I cannot say.

Did you pile one above another, or all along side one another?—I laid them in perhaps three in depth, all along.

You did the same at each furnace?—Yes.

Did you go to one furnace and the other man to another, or both to each?—One to each furnace.

Did you remain at one furnace the whole day?—I did.

You never interfered with one another?—Yes, there was only a passage between.

The flues adjoined together?—I do not know whether they are distinct flues, one was this side the passage, and the other the other.

When you put in a handful of ten or twelve in that way and laid them about three deep to burn, how long did you wait?—I waited till they were quite burnt out to an ash, then I put in more.

Till they were burnt to a red ash?—Yes.

How often did you draw out the ashes?—Seven or eight times in the day.

Did you ever allow the ashes to heap up till they had got half way up?—No.

How high did they get?—Not far.

Four inches?—Never so much,

They were never so high as six inches, the ashes and the tallies?—No.

What space was there above the tallies before you come to the top?—I am sure I cannot tell.

Was it as much as a foot; suppose this paper to be the top of the fire, was there more than that to the top of the furnace?—I should think there was a little higher than the book (*about twelve or fourteen inches.*)

Did you go on the whole day, never putting any more till you had burnt the former ones?—Yes.

Was the door ever red hot?—No, it was open the whole time.

It made a terrible flame, did it not?—I cannot say indeed.

You heard a great noise?—Not so much as I have heard.

It roared?—Yes, because there was not much fire in the flues.

The more fire there was the more it would roar?—Yes.

There was a great deal of air, and that would make it roar?—Yes, no doubt.

Did you ever, at any one time, see the fire ash up so high as to be near the top of the furnace?—No.

Not near the end where the flue springs?—No.

Did you ever have any smell of fire?—No.

Were you ever in the inside?—About 11 o'clock in the morning I was in the body of the House.

Was there any smell of fire then?—No.

How did you get in?—I went in with Mrs. Wright.

You went and called upon her by knocking at the door?—Yes.

Who opened the door, was she there?—She did.

What led you to go up?—To see whether there was any particular heat.

What led you to go, did any body send for you?—No.

Did Mrs. Wright send for you?—No, she did not.

What did Mrs. Wright say to you?—I asked her to let me go in just to see how the flues was. I was burning some tallies; she said she could smell the smell of wood being burnt; I said yes, we were burning wood instead of coals in the flues.

Did she say anything upon that?—I do not recollect her saying anything particular.

When you went up, you thought that the burning of wood was to heat the House, not to burn the tallies?—Yes, I was burning the wood tallies, and that was what she smelt come up from the furnaces.

Had you received any message from any body that led you to go into the House?—No.

Had you any message from any body that morning?—No.

Was any observation made by any body?—No, not to the best of my knowledge.

When did you first know that she had smelt the burning of wood?—At eleven o'clock in the morning.

What were her expressions?—I do not recollect anything particular, only that she said she smelt the smell of burning wood, and I told her I was burning wood instead of coals.

Did you go in with her?—I went into the House with her.

What more did you say?—I said there was no danger, or something of that kind.

Did

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Did you say that was by order of the Board of Works?—I said it was by orders I was to burn them.

That must have been in answer to something remonstrating from her, it was said to defend yourself, it was in consequence of some person blaming you for doing it; recollect what she said?—I do not recollect what she said.

Did not what she said convey to your mind that she was alarmed at what she smelt?—No, I do not know that in particular.

Did it not convey to your mind that she disapproved of what you were doing, that she did not like what you were about?—I cannot say that it did.

Then why did you say, in answer to that, I am doing it by orders?—On account that the flues had not been used since the House had been used.

You said you were doing it by orders, why did you say you were doing it by orders?—Because she did not know that the flues were used before I went up.

Did she not say something that made you give that answer in your defence that looked as if she did not like what you were doing?—No, not particularly so, for it is a thing I do not particularly attend to.

When a man says "I am doing it by orders," is not that by way of defending himself?—Certainly.

Then some person must have found fault with you?—No one found fault with me.

Did not Mrs. Wright ask you how you came to do it?—Yes; I said it was Mr. Weobley's orders.

Did not she say what a terrible smell there was of wood?—She said there was a smell of wood.

Had not she said she smelt fire?—No, she said there was a smell of wood, and I said, yes, I was burning wood instead of coals.

State shortly what passed?—I asked her to let me go into the House.

Did you tell her why you wished to go in?—Not till I got in.

What did she say?—I went in, and she began to tell me about a smell.

What did she say?—She complained of a smell of wood burning.

What were the words?—I cannot tell you the words exactly, but that she could smell a smell of wood burning, and I said we were burning wood below.

Why did you say you were doing it by orders?—She wanted to know why I was burning the wood there, and I told her it was by Mr. Weobley's order.

Are you sure she did not say something that intimated that she thought there was danger?—Oh, no.

Or that there was danger?—I do not recollect anything of the kind.

Did you not want to go in to look at the thermometer?—I did look at that.

Was not that your reason for going in?—Partly.

What was your other reason?—I went and put my hand to the place where the flue came up.

To see whether all was safe?—Yes.

You found it was not hot?—I did not find it particularly hot.

You went and looked at the thermometer?—Yes.

You went for the purpose of looking at it in part?—Yes.

What was your reason for wishing to go and look at the thermometer?—Because the flues had not been used so long, and I thought there might probably be a good deal of damp air in.

What has the thermometer to do with the damp air?—That I do not know.

Do you know what the thermometer is for, is not it for telling the heat?—I am not a judge of those kind of things.

Do not you look at it for the purpose of seeing how hot it is?—I do not know, I am sure; I merely looked at it to see what it was at, and I saw it was at 55.

What did you see when you looked at the thermometer?—I merely looked at it as I might look at that clock, and I saw it was at the mark of 55.

That it was at the heat of 55?—Yes.

Did not you look to see that all was right in point of heat?—I went partly to see how it might be.

Was not the object of your going to see, that there was no risk of fire?—I had no idea of risk of fire.

Why did you go to put your hand and feel how hot it was, and to look at the thermometer?—I had no idea of any fire.

Why did you want to know how hot it was?—Because I had been told, it is a thing that does not belong to me, that they keep it at such and such a heat, and I went up to look at it, that the House of Lords was heated to such and such a degree.

You went and put your hand on the flues, you say?—On the matting.

Near the flue?—Yes, near where I thought the flue came up.

You thought it was not too hot?—No.

You thought it was all safe then?—Yes.

How soon did you go up into the House again?—I did not go up into the House again during the day.

Explain why, when you went at eleven o'clock, when it had been burning three hours and a half, you remaining seven hours longer, you did not go up again?—I was not there seven hours longer.

You were there till three o'clock?—Yes.

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Why did you not go up again?—Mrs. Wright's boy came down to me.

About what time?—Between three and four o'clock.

You said you went away at three?—No, I was there from half past six till four.

When did he come?—It might be between three and four.

An hour before you went away?—No, not an hour.

What did he say?—He only came down and looked at what was going on, and took up a tally, and took up some in his hand and looked at them and went away.

Did he say nothing?—He said about the flues being too hot, or not so cold.

What did the boy say?—He merely came in and looked at the things, and asked me how long I should be before I was done, and then he went away.

Did he say nothing about the smell of fire?—No.

Any thing about the floors sweating?—No.

Any thing about the carpet being taken up?—No.

Anything about his mother?—No.

Did he not mention his mother's name?—No, not to my knowledge.

Will you swear he did not say anything about his mother?—No; it is not her son.

What is his name?—Reynolds.

You say when you went the first time all was safe, why did you not go a second time to see whether all was safe?—I did not see any occasion.

It might be in danger at three though all was safe at eleven?—I did not see there was any occasion to go at all.

How long were you away from it?—I suppose I might be a quarter of an hour or twenty minutes.

The other man took care of it when you were away?—Yes.

What did you say to the man when you went back?—I do not know, I said I had been up at the House.

And it was all safe?—That it appeared all right, or something of that kind.

Where did you go at four o'clock?—After we had done I went and had some beer.

When did you go to Mr. Weobley?—I saw him after that at Westminster.

How long after?—I should think about five, or after five.

Did you make a report to him that all was safe, and that you had burnt all the tallies?—No.

You did not make any report to him?—No, I did not tell him then that I had burnt them all.

When did you tell him that?—That same evening.

At what time?—I am sure I do not know, before I went home.

When was that?—About a quarter to six.

Where do you live?—In New Pitt-street, Westminster.

That is not far off?—No.

What did you see next?—I did not hear any thing about the fire till after I had had my tea; I was sitting at home nursing one of my children, and I heard the people run by; I learnt there was a fire.

Did you know it was at the House of Lords?—Not till I got into the street; it was all in a blaze there.

What appeared to you to be the cause of the fire when you first saw it?—That I am sure I cannot tell.

You did not suppose it was the wood being burnt in the flues?—I had not the least idea of that.

What is your opinion now?—I should not like to swear that that was the cause of it.

You can swear as to what is your opinion?—I am sure I cannot swear that it was the cause or not; it might probably have been the cause.

There is no other cause you can assign for it?—No.

How do you account for the fire from this, which was not above six inches in height, the furnace being three feet, as one handful was consumed before another handful was put on; how can you account for that setting fire to the flues?—I cannot account for it.

Can you tell about the bulk of the tallies that were burnt?—I cannot.

How many trips did you make?—I cannot swear, four or five.

How many did you bring each time?—Not a great many.

What was the weight of them?—I think the whole would not weigh three quarters of an hundred weight at a time.

How many can you bring on a truck at a time?—Not a great many, for there were no sides to it.

Have you any care of the chimnies in your department?—No.

Who takes care that they are swept?—That is the bricklayer looks after that, a man of the name of Hindle.

Is it his business to have the flues swept whenever he pleases?—No, he receives his orders from Mr. Weobley.

Were you aware when you began burning that they had not been swept since the House met last?—I was aware that they were not swept after the last session.

Or after the last session began?—I knew they were never swept, except once before the session began.

It never occurred to you to mention that to Mr. Weobley?—No.

How long would it have taken you to burn them in Palace-yard?—I suppose about three hours.

Suppose

Joshua Cross.

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Suppose you began at four o'clock in the morning, could not you have had it done by six?—No, it would take four or five hours.

That was nearly as long as you took in the furnace?—Yes, it would take pretty nearly as long.

The question refers to their being burnt in one fire in the open air; they would burn fast?—Yes, they were very dry, but I damped some.

Did you damp any of the tallies before you put them in?—Yes, I damped a good many of them.

Did any person direct you to do it?—Nobody.

For what purpose did you do it?—To prevent the flare.

How often did Mr. Weobley come to visit you while you were burning those tallies?—Three times.

At what times of day were those?—At half past seven, again between ten and eleven, and again about three o'clock.

Did you damp the first you used?—No, I damped them in consequence of its getting hot.

How did you know it was getting hot?—By seeing the appearance of the bricks.

What was the appearance it put on?—The appearance of red.

What do you mean, the outside of the flue?—No, the inside.

You said you went to the House of Lords to ascertain whether it was damp?—The damp air in the flue.

What made you think it would be damp in the flues?—Not being used for such a length of time.

You did not go to the House of Lords before you lighted the fires?—No.

What is the reason you damp the tallies, because you saw the brick flues were red hot?—No, not red hot, but looking rather red.

In the after part of the day did you look to see whether there was the same appearance of the bricks?—I did; there was partly the same.

Notwithstanding the damping the tallies?—I did not damp the whole of them.

There was still the same appearance of the red?—I burnt some that were dry that I got out, and then I damped some.

You say, Mrs. Wright took you into the House, and you looked at the thermometer; did she accompany you the whole time you were in the House, a quarter of an hour or twenty minutes?—I was not in the House the whole of the time; I stopped in the road and was speaking to one of the men.

Did Mrs. Wright go with you to the thermometer?—No, I think not; she was in the House.

You do not remember her saying anything else?—Nothing to the best of my knowledge.

Did you see Mr. Cox that day?—No, I did not.

Cox was not in the room during the whole day you were heating the furnace?—No, he was not.

What is the name of your comrade?—Furlong.

Is he here?—No, he is not; but I can fetch him if it is wished; I know where he is.

[*The Witness was directed to withdraw.*]

Mrs. *Eliz. Wright.*

Mrs. *Elizabeth Wright* was called in; and having been sworn, was Examined as follows:

IS it your daughter-in-law or your daughter, who is housekeeper of the House of Lords?—My daughter-in-law.

You were there, we understand, last Thursday morning?—Yes.

On a visit to your daughter?—Not on a visit; when she wants to go from home, I am there.

You were acting as housekeeper?—Yes.

About what time did you get up in the morning?—My servants always open the House to clean it at eight o'clock, and when the House does not sit, about nine. I go at ten, to see that every thing is done: I unlocked the west door, and observed a smoke in the body of the House; I had seen a little fog or smoke the day before, and I thought it was the same reason on the Thursday morning. We had a lad to open the west door, to prevent strangers making a thoroughfare of the House.

Is that Reynolds?—David Reynolds. I called in and I said, "David, there is a very strong smell in the House like wood burning;" he said, "Well, I think there is, ma'am." I said, "I should wish you would go and inquire about it;" he came back, and said, "Ma'am, they are burning the tally sticks in the flue." I said, "How so; fetch the man to me." He went and fetched a man to me, named Cross; I asked him what he was doing; he said, he was burning the tally-sticks belonging to the Exchequer. I said, "That is very odd; who gave you leave to do it?" He said, "The Board of Works." I said, "If Mr. Pulman was here, he would not allow you to do it and to annoy me;" and he went away.

Was that Cross?—Yes; I was in and out of the House occasionally that morning, but about half-past one I went down while the workmen were away, to see that no one should go about the passages, and I found the House much worse: I sent again to the man.

Whom did you send again?—I sent to the same man; he said, I had no occasion to be alarmed; all was right,

Did he come again the second time?—I do not think he did; but he sent a message in answer

Mrs. *Eliz. Wright.*

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answer to my message; then it went on till very nearly the time of locking up, between four and five; then between four and five I went into the House again, and then I sent to the foreman of the matters, and said to him, "Jukes, I do not like the appearance of the House, it is very hot below the Bar," and he ripped up the bump; I put my hand upon it, and was obliged instantly to take my hand away.

Where was this?—In Black Rod's box just where the flues are; he made answer, "It is very hot, for this bump is quite in a sweat." I said, "then go again to Cross, for I feel very uneasy; they will set this place on fire:" he then sent me word he should be done in an hour, and all was right; but the boy, David Reynolds, said, "The House is very hot; it is five degrees higher than it was in the beginning of the day; it was fifty-five in the morning, and now it is sixty." I sent him to the men to enforce them, but they would go on with it. I locked up the House at five o'clock, and at six o'clock Mrs. Mullencamp, who lives at the corner, went out for some errand and came back; as she came out, she halloed out, "Oh, good God, the House of Lords is on fire!" I took up the keys and ran, thinking some of the matting was on fire. I ran first up to the door by the Bar, and then I ran to the door opposite the Throne; and there I discovered just the size of Black Rod's box on fire, and the flames going up. I ran across to one of the door-keepers, of the name of Moyes: he went with me. We went by the Robing-room door; then we could have gone round the House, except that very spot; then I met Mr. Weobley: what happened then I do not know: I know I ran into the street without a bonnet or shawl, and my maid followed me, with the lead running on her shoulders.

When you sent to this man, and he said it was by orders; and afterwards, when you sent again and he said all was right, did you ever make any communication to any other person?—There were two gentlemen, a Mr. Shuter's son, of Milbank, and another gentleman, and I made the same remark to them; that it was in a great smother, and it was through their burning the tally sticks.

You saw them burn the tally sticks?—No; I had not been below.

Did you make any other communication to any other person respecting the alarm?—I did to Moyes's wife; I went up to see for Moyes, and I found his wife; he is a door-keeper; he is the receiver of peers' letters.

Did you go to the Home Department, to make any communication?—No.

Did you direct any to be made?—No.

Is there the smallest share of foundation for the story, that you sent and made communication to the Home Department, or any other office under Government?—No.

That is pure fiction?—Yes; I never did do so.

Did you make any communication to the Woods and Forests?—No; only to this man, Cross; he belongs to the Woods and Forests.

All that is entirely without foundation?—Yes.

You know of no communication being made?—N ; and when I heard the alarm of fire I did not believe it was anything more than just the matting, which has frequently caught, or I should have saved some of my things.

You say the matting has caught fire; have there been sparks?—It was hot at the King's entrance one Sunday; it was from the flues.

Putting too much fuel into the furnace?—Yes, and that was my reason that the men should not have a light; I did not see a man have a light in the House of Lords the whole of the day; none of the workmen had any.

When Cross came in, you opened the door and let him in?—Yes.

Are you sure he came in conseqnence of your sending for him?—Yes.

Did Reynolds come back before he came?—They both came together; I opened the west door and let them in.

Did he say any thing as to going to look at the thermometer?—He said something about it, but I do not recollect what it was; but he went to the thermometer.

Did Cross say any thing at the time about going and feeling over the fire?—I asked him if he was certain he had authority from the Board of Works, and he said yes, Mr. Phipps had been with him; I said, "let me see Mr. Phipps;" he said, "he is somewhere about the House," and I went to look after him, but could not find him.

You did not see Mr. Phipps or Mr. Weobley?—No, not till the fire had broken out.

Did you see Cross at all?—They were all round; I heard him say it was all right.

How soon after that did you send the second time?—About three.

Were you out in the course of the morning?—About three.

You sent Reynolds each time?—Yes.

Cross sent back a message by Reynolds?—Yes, he did.

Has the Clerk of the Works, or those employed under him, a master key by which they can enter the House of Lords?—Lately there has been an alteration in the works, for I had found that different persons had got keys; I mentioned it to Mr. Pulman; there were only four or five made, and I had one; the locks were altered.

Had Mr. Weobley one?—I should think not.

You saw Mr. Weobley in the evening after the fire broke out; did you then express any opinion about the cause?—No, I had not time; I then said, "Mr. Weobley, the House of Lords is on fire;" he said, "where;" I said, "come into the Robing-room, and I will show it you."

He said nothing about the tallies?—No, he seemed perfectly petrified; I did not wait a moment; I ran back to see for my servant, for I was afraid she would be lost.

[*The Witness was directed to withdraw.*]

David

David Reynolds was called in; and having been sworn, was Examined, as follows:

David Reynolds.

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ARE you in the employment of Mrs. Wright or her daughter-in-law?—I am in the employ of Mrs. Wright.

The lady who just left the room?—Yes.

Do you remember last Thursday morning being sent on a message by Mrs. Wright?—Not in the morning, but in the afternoon.

Were you sent on any message in the morning?—I was ordered to open one of the windows in the House.

At what time?—I suppose between ten and eleven.

Did you open a window?—Yes, I opened one then and one in the afternoon.

Was she with you in the morning?—Yes.

Did she say any thing respecting a smell of wood?—There was a smell of wood when I came on duty, just before ten.

Mrs. Wright observed a smell, as you did?—Yes.

Did she give you any directions in consequence?—Yes, to go down and tell the man.

What man?—Cross.

Did you go?—Yes.

What did Cross say?—I told him there was a smoke in the House; no, it was in the afternoon I went.

Did not Mrs. Wright send you down to Cross at ten in the morning?—No.

Are you quite sure of that?—Yes.

What did she tell you?—To open one of the windows.

After you had opened it, what did she say?—She went up stairs again.

You saw no more of her?—Not till she came down to show visitors round the House.

How soon after you opened the window did you see her?—I cannot exactly guess the time.

Was it an hour?—I cannot say; there were visitors in the House all hours of the day.

Are you quite sure she sent you with no message to Cross not till afterwards?—No, not till afterwards.

Did you see Cross in the House?—Not in the morning part.

After you opened the window?—Before I had opened the window.

Was Mrs. Wright with Cross when you opened the window?—Cross was not in the House when I opened the window.

Where did you see Cross when you opened the window?—Outside, where he was burning the tallies.

Did you not see Cross in the House?—Yes, in the morning part.

At what time in the morning?—I suppose about half-past ten.

Was Mrs. Wright by at the time?—Yes.

Were they speaking together?—No, I think she was going round with a party.

You did not hear Mrs. Wright say any thing to Cross?—No, I do not think I did.

When you opened the window was Cross there?—Yes; and he was looking at the ventilating clock.

At the thermometer?—Yes.

Was Mrs. Wright there?—Yes, she was in the House.

Did you hear her say any thing to him about the smoke?—No.

What brought him there to look at the ventilating clock?—I cannot say.

What were you doing?—I was at the door; I was stationed there by Mrs. Wright, to see that no improper persons came.

You had not been to fetch Cross up?—No, not at that time.

How soon were you sent with a message by Mrs. Wright?—It was in the afternoon when I went with a message between three and four.

Were you sent once or twice?—Once.

You are sure you were not sent twice?—No, only once.

Did you hear Mrs. Wright say any thing about a smell of fire, or burning wood, or smother before you went with that message?—Throughout the day there was a smell of wood.

Did you hear Mrs. Wright say anything about that?—Yes, two or three times.

To whom did she say it?—To me.

Did she say it to anybody else?—Not to my knowledge.

What did she say?—She said there is a dreadful smell of wood, and I told her they were burning tallies.

When did you first know the tallies were burnt?—They were being carried underneath the afternoon before.

Did you see them brought?—No, but I saw the trucks.

Did she say when she mentioned the smell that Cross had told her what it was?—No.

Did she ask you what it was?—Yes.

What did you tell her?—I told her it was the tallies.

For what purpose?—To be destroyed.

Did you tell her who was burning them?—Yes.

At what time of the day was it you gave her this information?—Two or three times.

Which was the earliest time; as early as half past ten?—No, not so early as that.

As early as eleven?—I cannot recollect.

Was not it three or four times before she sent you with the message?—Yes.

Did she appear as if she knew it before?—No.

Did she make any observation when you said it was the tallies?—She made no observation.

David Reynolds.

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Did she say by whose orders?—Cross told her.

When did you first hear Cross tell her by whose orders it was?—I think that was in the first part of the morning.

Between ten and eleven?—Yes, when he came up.

When Cross came up with or without your going for him, he came and told Mrs. Wright something?—Yes, they spoke together, but I was not there to hear all that passed.

State what you heard Cross say to Mrs. Wright, not what you have heard since; what did you hear Cross say to Mrs. Wright about the tallies?—I could not hear what they said together.

Why did you say a little while ago that it was in the early part of the day that Cross told her by whose orders it was?—Because he told me afterwards that it was Mr. Weobley that ordered it

When was that?—When he was going out, he was saying so to Mrs. Wright when he left her.

Was it to Mrs. Wright he said it was by Mr. Weobley's orders?—Yes, she was going the other way on purpose to attend the visitors.

Did you hear Cross tell Mrs. Wright by whose orders he had done this; do you recollect hearing Cross tell Mrs. Wright that he had Mr. Weobley's orders?—No further than I heard them talking together, but I could not imagine what they were saying, but as he was walking away he said it was by Mr. Weobley's orders.

Did he say that to Mrs. Wright, or to you?—He told it to Mrs. Wright.

Then it is true that he said at ten or eleven o'clock he was burning the tallies by Mr. Weobley's orders?—Yes, he did.

Are you quite sure at that time Cross came up without your going for him?—Quite sure.

Or without any body going for him?—No one went for him, to my knowledge.

Did you tell Mrs. Wright, in the early part of the day, between ten and eleven, that the tallies were burning by Mr. Weobley's orders?—No, I did not tell her by any one's order; I told her the tallies were burning.

You did not know by whose orders till you saw him at ten or eleven?—I heard next morning that the evening before———

You say between three and four o'clock Mrs. Wright desired you to go to Cross; what next passed?—Mrs. Wright told me to go and tell Cross that the House was quite in a smoke, and that the Throne could scarcely be seen.

How long have you been in the House of Lords?—Between four and five years.

Is there often a smoke?—No.

There had been smoke the day before?—I did not see that.

Did you ever see any smoke so bad as that?—No.

What passed?—I went and told Cross that Mrs. Wright said the House was in a complete smother, and that the Throne could scarcely be seen; he said he could not help it; that he should be done in about another hour, as he had not many more to burn.

Did you mention that to Mrs. Wright?—No further than I think I told her accordingly that Cross had said that he could not help it, that he would be done in another hour, as he had not many to burn.

Was there any thing said then about his doing it by orders?—No.

Were you sent again?—No, I left about half an hour afterwards; Mrs. Wright discharged me for the evening.

Was there any other person about that she was likely to have sent a message by?—No.

[*The Witness was directed to withdraw.*]

Mr. *James Minion Cooper* was called in; and having been sworn, was Examined, as follows:

Mr. *J. M. Cooper.*

YOU are in the founding line?—I am.

Have you been lately at Birmingham?—Yes.

When did you leave town to go there?—On Thursday morning at seven o'clock.

Had you seen Mr. Barron the night before?—Yes.

And the next morning you went?—Yes.

When did you come back?—I came back on Saturday morning at seven o'clock.

How many nights were you absent from town?—Two nights and two days.

Did you come back by the Dudley or Birmingham coach?—I came back by the Union, Shrewsbury coach.

At what time did you leave Birmingham?—About four o'clock on Friday afternoon.

Had you been at Dudley in the interval?—Yes.

When you left on the Thursday morning at seven o'clock, when did you arrive at Birmingham?—About a quarter past seven in the evening.

Had you dined on the road?—Yes; we had no dinner, we had breakfast on the road; I waited until the Dudley coach was ready, which was about eight o'clock.

Your object was to go to Dudley?—Yes.

Where had you been in the interval?—I waited outside the coach-office door.

Are you sure it was about eight o'clock when you left for Dudley?—Yes.

It is about eight miles, is it not?—It is about eleven.

You got there in about an hour and a half?—I got there at ten minutes before ten; I reached the Bush Inn at Dudley.

Where did you go to?—I went into the travellers' room, which I was in the habit of doing, being accustomed to go there.

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It is a house you are accustomed to use?—Yes.

And you use it frequently?—Yes, I have been there five times this year.

Were there many people there?—There were four besides myself.

Did you know any of them?—No, not one.

Were they travellers, or people of the place?—They appeared to be travellers.

Were any of them persons who had come with you from Birmingham in the coach?—No.

When you went into the room, did any thing pass which attracted your attention?—I called for my tea as soon as I got in; it was brought in; during the time I was drinking my tea——

You had not fallen asleep in the interval?—No; there was one of the travellers who had his slippers on; one of them went out to the door and returned, after two minutes absence, and says, "I have just heard that the House of Lords is burnt down, occasioned by some carpenters being careless with their shavings;" it struck me very forcibly at the moment that it was strange I should have left London and not heard it, still it was possible it might be so. One of the other gentlemen said, "Is it in the paper?" he says, "No, it cannot have got into the paper yet." "How did you hear it?" "I heard it from a person that came down by the coach."

What sort of a person was this?—They were all respectable persons as travellers.

Have you ever seen him since?—No.

Did the others hear it?—One I think did not, he was asleep; the others did, and one of them made that remark, that he asked if it was in the paper, the other said no, there was not time for that, but he had heard it by a person that came by the coach.

Did he say what coach?—No.

This might be between ten and eleven o'clock?—Yes, about half past ten.

Did you continue to talk about it?—There was nothing more said about it. I went to bed. I went the next morning, first to the old Butterley Iron Works, about a mile from Dudley, and then to Netherton Iron Works; from thence I returned back to the Butterley, and from thence I got a gig, and went on to Bilston, to another iron work that is about four miles from Dudley; the person that I took with me took the gig back to Dudley, and I waited for the Union coach.

You did not return to Dudley?—No.

You did not see the man that told you this afterwards?—No.

Should you know him again?—No; I did not think so much of it then as I did afterwards.

You dined at Bilston perhaps?—No, I went by the Union coach to Birmingham, and dined there.

At what time?—About three o'clock.

You stayed there how long?—Till the coach was ready; they change coaches there; they stay some time; we left there about four o'clock on the Friday afternoon.

You came inside?—No, I was outside.

Were you outside going down?—I was.

You got to town about seven on Saturday morning?—Yes.

Whom did you see then?—I saw my partner, and others; I did not see Mr. Barron till about two o'clock on Saturday, but I did not communicate this matter to him then.

When during that day did you first hear the news of there having really been a fire?—The first I heard of it afterwards was at Oxford, on the way to town, at eleven o'clock at night of the Friday, that was in the travellers' room after we got off the coach.

Were you there when the news arrived, or had it arrived?—It had arrived before, but they were then anxiously waiting for the paper, expecting that evening's coach to have brought down the particulars in the evening paper.

They had heard it only by passengers, and had not got the paper?—That was what I understood.

The morning paper of Friday would contain an account of the fire?—It probably would.

The papers come away from London at seven or eight on the Friday morning, do they not?—They should, I should reckon.

The morning coach would come away at seven, and ought to have got to Oxford by twelve or one?—It was most likely they had got the morning papers, and were waiting for further particulars by the evening paper.

Did you meet nobody on the road between Oxford and Birmingham?—We had stopped to change horses; there was no meal between Birmingham and Oxford; they get into Birmingham at three, and dine and start at four, and sup at Oxford.

You had not been off the top, except to stretch your legs?—No.

When you left Birmingham at four o'clock, were you in the coffee-room before you started?—I was.

Did you hear any conversation?—Not respecting that; there was not a word passed on the subject.

The news must have been in Birmingham before you left it?—It might have been.

At what time did you get to Birmingham, having left at seven in the morning?—At a quarter past seven at night.

Did you hear any talk at Birmingham, on any part of the day, on this subject?—I had not.

At what hour does the mail reach Birmingham?—The mail reaches about six or half-past six in the morning.

Can you account for nobody in the coffee-room talking about it on that afternoon?—Yes, I can,

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I can, for the gentlemen who were in the coffee-room came from Shrewsbury; there was no person who had come from London.

You did not hear the waiters talk about it?—No.

Do you know any person that was a passenger in or upon the coach with you?—No, I did not know one of them personally.

When you first heard of this at Oxford, you heard that the House of Lords had been burnt?—Yes, when first I heard it mentioned was at Dudley, the next was at Oxford.

Who told you of this?—The waiter at Oxford told me of it.

What did you say?—I said, "I had heard of this at Dudley;" he said, "Indeed! how could that have been?" I said, "I am surprised myself," for I did not see how it could come down, and he told me that it had broken out at seven in the evening; I told him I heard of it at ten.

Did you tell him you had heard it at Dudley the night before?—Yes.

At what inn at Oxford?—I think it is the Roebuck, but I am not certain, but where the coaches stop.

He expressed his surprise, did you tell him when you heard it?—Yes, I told him I had heard it the night before.

You said you were as much surprised as himself, for you did not see how it could come down?—I did.

Did you mention it to any body else?—Yes, I mentioned it to several people.

That came on the coach?—Yes, we left there about twelve o'clock at night.

During the night had you conversation at the top of the coach?—Yes, two gentlemen behind, and the guard.

Did you mention this extraordinary coincidence to the guard?—One of the other passengers mentioned it to the guard, and the guard said he would not believe it, and I said that it was a fact, and that I had been informed of it on the Thursday night at Dudley.

What guard was that?—The guard of the Union coach.

When did that conversation take place?—Soon after we came out of Oxford.

Whom did you see first after you came home to London?—I believe I saw my partner first; but I did not mention it to him; I was very tired, and I wanted a little rest.

You went to bed?—No, I was obliged to go out; I saw Mr. Barron, but did not mention it to him then, but I mentioned it first to a medical man of the name of Jones, who was attending my family; he called upon me yesterday, and said he thought I was wrong in not communicating what I had heard.

When did you mention it to him?—About two o'clock on the Saturday afternoon.

Is Mr. Jones a physician?—No.

A general practitioner?—Yes.

The first person you saw on Saturday was your partner?—I think it was.

You say you went to several iron works on the Friday morning; did you mention it?—No, because I thought it might probably be a rumour, and it did not strike me much till I heard it at Oxford, then it struck me it must have been the work of an incendiary.

You did not believe it?—No, I did not,

You say some gentleman in his slippers went to the door; did you hear any coach stop at the door?—No, I did not.

The unknown person at Dudley did not say at what time it had happened?—No.

How long did he remain there?—I left him when I went to bed.

When you went in were all the persons you refer to there?—Yes.

What was this man doing?—I believe he was reading.

How long had you been near him before he began to speak?—I think it must have been very near half an hour.

When you came in the man was in the room?—Yes.

How long did he remain sitting by you?—I think about a quarter of an hour.

Before he went out he said nothing?—I think he was in conversation with another gentleman.

When he came back what did he say?—He said, "I have just heard that the House of Lords is burnt, owing to the carelessness of some of the carpenters."

Was there any waiter in the room?—I do not think there was: he was not absent above a minute.

Did you hear any more conversation about it that night?—No.

Nor the next morning?—No; I was not many minutes in the room the next morning; I left the room, wishing to get round to the different places.

You have no guess whatever of who this person was?—No; it did not strike me till I heard it was a reality.

Was what he said overheard by other persons?—Yes, one of them made the observation, "Is it in the paper?" and he said, "No, it is not time for it to be in the paper."

He did not say at what time the fire had taken place?—No, he did not.

Where does the Union coach come to?—The Bull and Mouth.

[*The Witness was directed to withdraw.*]

Richard Reynolds was called in; and having been sworn, was Examined, as follows:

Richard Reynolds.

WHAT are you?—A fire-lighter.

Are you father to the boy who has been examined?—Yes.

How long have you been a fire-lighter?—I dare say it is five or six years.

How

Richard Reynolds.

20 October 1834.

How long has your son been employed about the House?—These three or four years; he assists me in the morning in laying the fires.

Do you recollect being in the House of Lords last Thursday?—Yes.

At what time?—Between nine and ten o'clock, when I went down.

Whom did you see?—Cross called me to show the flues, he told me he had got possession of the flues, and I went down to look at them; I said, you are going on very rapid, burning those sticks.

How long did you stop and stand by him?— I did not stop above three or four minutes.

What did you see him doing?—Laying them in as fast as he could into the flues.

Did he take a handful and let them burn till they were burnt, or fill the furnaces full?—They filled them full, each flue.

Each furnace?—Yes, there was a man at each of them.

Did he take ten or twelve at a time, and throw them in three deep?—They might take as many as that, because they could not take any more in.

How many would it take to fill the furnace?—They took them in by handfuls.

Did you, during the three or four minutes you were there, see the state the furnace was in?—Yes, I saw it shine by their putting so much in.

How deep was the fire from the bottom?—I know the flues, I have fed them.

The question refers to the mode; the door was open?—Yes, both the doors were open.

Did you see how high up they had heaped the sticks?—Three quarters and more I dare say.

How high is it altogether from the bottom; two feet?—No, less than that.

How deep is the place where they put in the fire?—About a foot and a half.

Had they filled it up with fire?—Yes, they had.

More than a foot?—Yes, I should imagine they had, when I was in there I think it was more than a foot.

Was it very near chock full?—Yes, it was.

Was there a great blaze going on?—Yes, astonishing.

Could you hear it?—Yes, I could hear it perfectly.

Was it very hot?—We could not perceive it was red hot there, for it went up the flues.

Did you see a great flame?—Yes.

How often in three minutes did they put in sticks?—I only saw them feed each of them once.

How much did they put in to feed it?—Five or six handfuls at a time.

How much might each handful contain, ten or twelve?—Yes, it could not be much more.

Did you hear him use any expression?—No, he told me they were going to burn them all.

You did not hear him use any expression about his work, or what he was doing?—No.

You say he said something to you, what did he say to you?—Only calling me to show that he had got those things to burn.

Did not you say that he told you something?—No, only that they had got the use of the flues.

Did he not say anything to you while they were burning?—Not a word, to the best of my knowledge.

What did you say to him?—I said, Cross, you are going on very rapid.

What did he say to you?—He did not say a word.

You left him there?—I did.

Did you have any conversation with the other man?—I did not know him.

Was he putting them in with the same rapidity?—Yes.

Did you look at both the flues and see that they were both putting in with the same rapidity?—Yes.

Where did you go afterwards?—I went along the passage and looked at the fire in the further lobby where the porter sits.

Where did you go after that?—I went outside.

You saw no more?—No.

Were you in the House of Lords again that day?—Yes, about two o'clock.

You were not there during the whole of the day?—I had got no orders to be in the House.

Where did you go?—I went home.

When did you first come back to the House of Lords?—Between one and two.

Did you then go into the House?—Yes, I went into the House at that time.

Did you see Cross?—No; I did not go down to Cross any more.

Did you smell any smell at that time?—I did not.

Did you see Mrs. Wright?—No, I did not.

When did you first take any message?—That was my son. I went home and went to bed, as I was going on duty that night.

When did you first hear of the fire?—Between nine and ten.

Did you say any thing relating to the cause of it, when you saw it?—I went down and looked at it.

What did you say about the cause of it?—It was them sticks burning.

Did you say so?—No; I told Cross you are going on too rapid.

When you found the fire had broken out at night, what did you say?—I was coming then to go on duty. I was frightened when I saw it.

Did you say what the cause was?—We all judged it; and I know that is the cause.

Richard Reynolds.

20 October 1834.

When any body told you the House of Lords was burning, did you say any thing as to the cause?—No; they were all strangers to me.

When did you first say that it was owing to the tallies?—I said the next morning, if I recollect right, that it must be that; that it was from the burning those tallies, and nothing else.

How long have you been engaged in looking after that stove?—About four months in the Session.

They burn coals?—Yes.

Do you light it?—I do.

That is your duty?—I do it.

Do you fill it full or only half full?—Coals will not light it without.

How much coal do you generally put in?—About three parts full; but then it is all caked together, and lasts five or six hours, and never no accident has happened while I have had the care of those flues.

When you put those three parts full, did you ever see the door of the furnace red hot?—I have when it has been severe weather.

When you had made a strong fire?—Yes, to last all night; then the next morning it was all down again; but it is a regular heat from the coals.

Did you ever see so much fire in that stove before, as you saw in it that morning?—No, never.

Nor any thing like it?—No, and I told them of that.

Did you go and tell any body else that you had seen this?—No; for this man, Cross, and the other had had possession of a key; my key was hung up.

Did they say that it was by order of the Board of Works?—They did not say a word to me about that.

You have a key of the House of Lords?—I have a key of the flues.

Have you a key of the House of Lords?—I used to have one, but they have been all taken away from us, and the locks altered; we used to have one from the Robing Room.

[*The Witness was directed to withdraw.*]

James Pulman, Esquire, was called in; and having been sworn, was Examined, as follows:

J. Pulman, Esq.

HOW long have you been Yeoman Usher of the Black Rod?—I have been Yeoman Usher four years; having acted one year for my predecessor, Mr. Quarme. I have discharged the duties of the office five years.

Are you acquainted with the process of heating the House, by means of furnaces and flues?—Perfectly.

It is not done, except occasionally during the recess, is it?—I do not recollect any instance of its having been lighted during the recess, until about a week or ten days previously to the meeting of Parliament. I have usually sent to the superintendent of the flues, and directed him to light fires for the purpose of warming the House.

Then they light them from day to day?—Yes; I have understood that the man came about two or three o'clock in the morning, lighted the fires, and superintended them during the day.

In your communication with those about the House, has it been generally considered that that was to be attended to with some little caution?—Undoubtedly.

Have precautions been given in respect of the lighting?—Yes, certainly; I have suggested that the man should be cautious not to overheat the flues, and more especially from having frequently felt the inconvenience of the floor being very much heated near to Black Rod's box, where the flues pass.

Are you aware of its having gone so far as to set fire to the floor?—Not in that part, but I recollect some years ago, there was an alarm one morning, I think, about ten o'clock; a door-keeper of the name of Wright saw some smoke issuing.

Was that any relation of Mrs. Wright?—The father of Wright, who recently left; he was a door-keeper; the father-in-law of Mrs. Wright. We immediately sent to Mr. Lee, who was then the officer of the Board of Works, superintending the building; he came and removed a skirting-board, and found that the wood was ignited.

In what part was that?—In the lobby, about half-way between the grand staircase and the door leading to the Bar; that accident was occasioned by another flue, a flue lighted at the bottom of the grand staircase.

One of the inside stoves?—A stove at the foot of the Peers' staircase.

That was extinguished?—Yes; instantly.

How long ago was that?—I think about five years ago.

Since you came into office?—I am in doubt whether it was since I came into office; but I happened to be there at the time.

Do you remember any other occasion on which there was an alarm of fire?—No; I do not recollect any other occasion.

How often are the flues cleaned?—From my own knowledge I cannot answer that question, but I have understood the practice to be, that after the matting has been taken up by the officer of the Board of Works in the autumn, the stove-traps have been removed for the purpose of opening the flues, without which there is no way of opening them; that is usually done previously to the meeting of Parliament.

And only once in the year?—Only once in the year.

J. Pulman, Esq.
20 October 1834.

In your experience, you never recollect this having been done more than once in the year?—No; it is possible it may have been done without my knowledge, but I do not think that likely, because it can be done only when the matting is taken up.

There was no extraordinary neglect on this occasion of the cleansing of the flues?—Certainly not; the time had not arrived for the flues to be cleansed in the usual manner.

Is there a good deal of combustible material in the neighbourhood of the flues?—In the spot, near Black Rod's box, the floor was covered with a species of sacking, something like the material for oil cloth, to prevent the dust filtering through, as it would through matting; it has been recently used for that purpose. Within the bar the floor is of wood; the bar itself is composed of wood covered with canvas, and is covered again with scarlet cloth. Black Rod's box is composed of wood, covered with canvas and scarlet cloth. The sides of the House, below the tapestry, were covered with canvas and scarlet cloth. What appeared to the eye to be open pannels, was nothing more than painted canvas, within the House. Then the lobby, immediately outside the bar, the floor was of wood; and the walls, from the floor to the ceiling, were hung with canvas, and covered in distemper.

From what you know of the circumstances, and your previous experience, have you any doubt as to the origin of the fire?—I have no doubt whatever, having been informed where the column of fire was first seen.

Where was that, according to your information?—My information is this,—that the wife of one of the doorkeepers had seen a light under the door, the door at which the Commons enter; that she had reported this to the deputy-housekeeper; that the deputy-housekeeper ran to the apartments of the doorkeeper Moyes; that not being able to enter at that end, he ran to the robing room, and opening the door of that, he saw, as he states to me, the fire issuing from Black Rod's box.

How near did the flues go to Black Rod's box?—I rather think part of the flue passes under the angle of the box; for in the angle between the box and the bar, when I have stood there, I have felt inconvenience from the heat.

How far is the corner of Black Rod's box, under which the flue goes, from the furnace in which the tallies were burnt?—I should imagine the distance could not be more than eight or ten feet. The stall was in the vault immediately under the bar door, as I take it; and I come to that conclusion from this fact. The opening to the vault in which the furnace was, was in the passage leading to Mr. Ley's residence. The first door you came to was the room where the barristers' wigs and gowns were deposited, attached to Howard's Coffee-house; near that there was the deputy-speaker's room. In the basement immediately beyond that, there was this vault; and over a part of that vault, the lobby, leading to the bar; consequently the stove must have been very nearly under the bar door.

You did not know any thing about the burning of these tallies from the Exchequer?—Not the least.

[*The Witness is directed to withdraw.*]

Sir *Robert Smirke* was called in; and having been sworn, was Examined, as follows:

Sir *R. Smirke.*

WERE you acquainted with the construction of the flues under the House of Lords?—No, I was not.

You never saw them?—Not till Saturday,

Was the spot pointed to you where the tallies were burnt?—It was not pointed out to me, I knew where it was.

There was a flue, their Lordships understood, passing near Black Rod's box?—Yes.

How far from Black Rod's box was the place where the tallies were put in?—I did not measure it, but I think it could not exceed eight or ten feet.

How near the mouth of the furnace was the first combustible material it would meet in going towards the House of Lords?—I cannot answer that question decidedly; but I should think it was near that place I allude to.

Do you think there was any combustible material before it got to Black Rod's box?—I saw none.

Had you any opportunity of observing the construction of the flue?—Not much; for it was so much destroyed.

What was the calibre of it?—I did not measure it.

Can you tell about what it is?—I should say, perhaps from fifteen to eighteen inches wide.

It was a square flue?—Yes.

It was less than a foot and a half?—I should think so.

Did it taper and become narrow as it proceeded?—I did not observe that.

Did you observe any thing of the state of the flues?—Not particularly.

Did there appear to be much soot in them?—I could not tell, it was so much destroyed.

Supposing combustible materials at the distance of ten feet from the furnace, do you apprehend that if that furnace was three-fourths filled with very dry wood, the door being left open so as to create a great draft, that would be capable of so far heating the flue as to set fire to the combustibles?—I am afraid it would, certainly.

At ten feet distance?—Yes.

Would dry wood placed in such a situation, with a blast of air blowing through it, be accompanied with more danger to such combustible materials than a fire of coal?—At that distance it would.

Sir *R. Smirke.*

20 October 1834.

The body of coal would throw up a body of heated air?—Yes, a coal fire would not, I think, create so powerful a heat as dry wood.

Would it not operate like a reverberating furnace in consequence of the draft driving through it?—Certainly.

Would it heat the bricks very much?—Yes.

Supposing tallies to the amount of two-thirds or three-fourths the bulk of that furnace by about two feet or a foot and a half high to be burning, would that be sufficient to account for the heating the flue to such a degree as to burn the combustible materials at the distance of ten feet?—I think it would.

Upon the whole, do you think that was the cause?—Yes, I do.

[*The Witness was directed to withdraw.*]

Joshua Cross was again called in, and further Examined, as follows:

Joshua Cross.

DO you remember a man of the name of David Reynolds coming to you while you were putting in the tallies?—A lad came in in the afternoon.

The question refers to an old man of 50 or 60, the fire-lighter?—I called to him and told him what we was doing of.

Did you say you were in possession of the flues?—I told him I was using the flues for burning the tallies.

Did you say you were in possession of the flues by order of the Board of Works?—I do not recollect that I did.

Did he come and stand by you while you were burning the tallies?—He came in and looked on.

How long was he there?—I do not suppose he was there above five minutes.

He saw the manner in which you were burning them?—He saw me burning them.

Did he make any particular observation as to the mode of your burning them, and the rate at which you went on?—I do not remember any particular observation.

Did he say nothing?—I do not recollect that he said anything more than very well, or something of that kind.

He did not say anything to you respecting what you were about?—No; I called him in, as I said before.

He did not say anything to you about your proceedings?—I cannot say as to any particulars.

He did not say that you were burning too rapid; he did not say that you were going on too rapid?—To the best of my recollection he did not; I do not recollect it.

Will you swear he did not say you were going on too rapid?—I would not swear he did not say so; but I have no recollection of his mentioning any such a word.

You will not swear he did not say so?—I cannot swear that he did not say so.

Has any thing ever happened to you in the way of your being tried?—Yes.

How long ago was that?—I came home three years ago last Saturday.

You were not only tried, but sent abroad?—No, I was sent to the Penitentiary at Milbank.

How long ago was that?—I was there three years six months and five days.

How long ago was that?—I came home three years ago.

Had you been employed by the Board of Works before this happened to you?—Yes.

Did they prosecute you?—Yes, it was under the Board of Works.

How long had you been so employed before they prosecuted you?—Ten or twelve years.

Was it for theft?—It was for things given to me to take away from a building; and I was stopped.

And they sent you to the Penitentiary for taking away those things which some person gave you?—Yes.

It was not only that, but the jury convicted you, and the judge sentenced you to go to Botany Bay for 14 years?—No, for seven years.

Have you had any pardon from the King?—No; I have had no pardon.

But your sentence was changed into the Penitentiary?—Yes.

How did you happen to get back to your employment in the Board of Works?—I was employed first in removing the records from Westminster Hall.

Those which were in the wooden building?—Yes.

That was after you came out of the Penitentiary?—Yes.

Did you get a good character from the Penitentiary?—I did.

And went back to your former employment?—Yes, I did.

Who communicated with you, and said you were to be taken back; who was the officer of the Board of Works who employed you?—I was employed under Mr. Lee, on Mr. Johnson's account first.

Who first recommended you for employment under the Board of Works?—I spoke to my old master, Mr. William Holroyd.

Who is Mr. William Holroyd?—He did live in Northumberland-street.

Do you know that he spoke to any officer of the Board of Works on your behalf?—He spoke to Mr. Lee, I believe.

Who was Mr. Lee?—The labourer in trust at Westminster.

And you were employed in consequence?—Yes.

How long ago was this?—Three years next month.

Joshua Cross.

20 October 1834.

Who first recommended you to the Board of Works fifteen years ago?—It was by my father speaking to Mr. Holroyd, and my going into Mr. Holroyd's employment.

Did Mr. Holroyd recommend you to the Board of Works?—I do not know, I was employed by the Board of Works as watchman.

Fifteen years ago?—No, I do not know that it was fifteen years ago.

Was it ten or twelve years ago?—It must be above ten years ago.

What person in the Board of Works hired you?—I was hired at Westminster, under Mr. Crocker.

Was Mr. Holroyd the plumber engaged by the Board of Works?—Yes.

You were employed by him?—Yes.

Then you were taken on as the watchman?—Yes.

After Mr. Holroyd employed you, you were employed by the Board of Works?—I was not employed more than as being a watchman by the Board of Works.

Were you employed long as the watchman by the Board?—I should think I was a watchman between two and three years.

How long ago is that?—About ten years ago.

What employment were you in after that?—Then I went to Mr. Holroyd.

Were you in Mr. Holroyd's service as the private workman, as a plumber, from that time to the time of your trial?—I was.

Were you in Mr. Holroyd's service at the time of your trial?—Yes.

After you came out of the Penitentiary, did you go back to Mr. Holroyd?—Mr. Holroyd consented to take me on again.

How long did you remain with Mr. Holroyd?—I remained with him till the last change of contracts, then I was turned over to Mr. Clerk; that was only last June.

Are you now in the employment of the Board of Works?—No, I am employed by Mr. Clerk; I am not paid by the office.

What contract has Mr. Clerk?—He is the master plumber.

What has the master plumber to do with burning tallies for the Board of Works?—He has nothing at all to do with it.

How did you happen to be employed by Mr. Weobley to burn those tallies; were you ever employed by him before?—I have been under him since he has been there.

How long ago is that?—Between two and three years.

What is Mr. Clerk?—A master plumber.

Is he employed by Mr. Weobley?—He is employed by the Board of Works.

Did Mr. Weobley ever employ you before the other day, when he set you to burn those things?—I have assisted to do several things. My regular work at the Houses of Lords and Commons is to attend to the water-closets and cisterns.

Mr. Clerk is your paymaster for that?—Yes.

Do you receive directions from anybody but him?—He does not give me directions, my directions are from Mr. Weobley, but Mr. Clerk pays me.

It was your duty to do anything you were ordered to do?—Yes, when I was there.

Who could turn you off, Mr. Clerk or Mr. Weobley?—Mr. Weobley could turn me off for anything I did wrong.

You were not hired by Mr. Weobley, but by Mr. Clerk?—Yes, and Mr. Clerk pays me.

But you are superintended by Mr. Weobley?—Yes.

You have been two or three years about the House of Lords?—It is three years the 3d of next November.

Had Mr. Clerk any knowledge of your burning the tallies?—No.

Does Mr. Weobley give you orders, or Mr. Clerk?—Mr. Weobley.

Mr. Clerk does not give you your orders?—No, he does not come to give me orders.

You had a key to the gate leading to those flues?—Yes.

Who gave you that key?—I had it from Mr. Weobley.

When did he give you that key?—Some time ago, to lock up the place at night and to look after the cistern.

Is this a master-key that opens all the locks?—It opens all the locks to go on to the roof to get to the cisterns.

Does it open any other locks?—No, only this outside; the iron gate goes up to what is called Guy Faux's tower.

Are you and the other man, Furlong, liable to be called on by Mr. Weobley as if you were his workmen, to do any work about the House of Lords in your department?—Yes, to do all that is wanted to be done.

Just as if you were his servants?—Yes.

Just as if he hired you and he was to pay you?—That is my orders, to pay attention to what Mr. Weobley tells me to do.

Just as if Mr. Weobley was your immediate employer?—I do not rightly understand the question.

Are you liable to be called upon at any moment to do what Mr. Weobley desires, and do you receive your orders from him just as if he employed and paid you?—Yes; if he wants anything done he tells me, and I do it.

[*The Witness was directed to withdraw.*]

[Adjourned till To-morrow, at One o'clock.

Tuesday, 21 October 1834.

Alexander Milne, Esq., was again called in, and further Examined, as follows:

Alex. Milne, Esq.

21 October 1834.

THEIR Lordships understand there is one circumstance upon which you wish to make some correction?—Yes. I stated yesterday, that when I met Mr. Phipps at the Tally-office, Mr. Weobley was present; but it was on the preceding day, when I met with Mr. Seward, the principal surveyor of works, that Mr. Weobley was present.

He was not present on Tuesday the 14th, when you first saw Mr. Phipps?—No, he was not; that was on the preceding day.

What is your estimate of the bulk of those tallies?—I should believe them short of two one-horse cart loads.

How many cubic feet of tallies?—I should think about 80 in the whole, but Mr. Seward, who saw them with me, can give his opinion; the quantity certainly could not have amounted to 100 cubic feet.

You were in the Exchequer?—I was deputy chamberlain of the Exchequer.

How long had you been in that office?—Twenty years.

Which of the courts of Exchequer is that?—The receipt of Exchequer.

There are two courts of receipt of Exchequer, are there not?—No.

Is that the same court of which by the Bill a new arrangement was made?—No.

Was the office in which you were deputy chamberlain abolished before the late Bill?—Yes, it was.

Had the burning of the tallies anything to do with the arrangement under the new Bill?—Nothing whatever.

Used the tallies to be occasionally burnt from time to time before that Bill?—Theywree

Are you aware that they were ever burnt in an open space in Tothill-fields?—I do not. know either way.

Where used they to be burnt?—Chopped up and burnt by the officer in the building, or taken by him and used up as firewood.

No communication was ever made to you of any change having taken place in the mode of executing your instructions, either by Mr. Phipps or Mr. Weobley?—None whatever.

You thought you had given instructions to burn them in the yard or some convenient place?—I did not give those instructions; but Mr. Weobley told me he meant to burn them in the yard, and I left the yard under the impression they were to be burnt there.

Did you give Mr. Phipps directions to burn them in the yard or some other convenient place?—No; I gave him directions to destroy them, and, pointing to the chimney in the room, I said, "if you burn them there you must be very careful, as the building is only of wood and plaister;" and he said, "I intend to have them taken out into the yard and burnt." To that, I think, I made no reply, but some caution to be careful.

Are you sure you did not say, yes, burn them in the yard or some other convenient place?—No, I am very confident I did not give any directions as to their being burnt in the yard or some other convenient place.

Except to approve of what he said?—Just so.

[*The Witness was directed to withdraw.*

James Pulman, Esq. was again called in; and further Examined, as follows.

Jas. Pulman, Esq.

ARE you aware that it was usual to burn a particular kind of coal in the flues referred to?—Yes, it was, always.

What sort of coal is that?—I really cannot describe it, but it was my duty to order the coals, and I used to order a particular quantity for the use of the flues; I understood it was called Welsh coal.

What was the quality of it?—It had the property of throwing a great deal of heat, and was not so inflammable as the ordinary coal.

You mean that it did not make much flame?—Yes.

What was the object of preferring that to the sea coal?—The object was to produce a heat and as little flame as possible; I also used to direct the small coal to be taken from the general depôt to that place for the same purpose, to be mixed with the coals I ordered for the use of the flues.

[*The Witness was directed to withdraw.*

Mr. *John Snell* was called in; and having been sworn, was Examined as follows:

Mr. *John Snell.*

WERE you in the House of Lords on Thursday the 16th?—Yes, I was; I went there on Thursday.

You do not belong to the Establishment, do you?—No; I went to the House of Lords on Thursday, about four o'clock.

For what purpose?—To see the House.

You live in the country?—Yes, I live at Tiverton, in Devonshire. When I came into the House I observed a quantity of smoke.

Who

Mr. *John Snell.*

21 October 1834.

Who accompanied you?—Mr. Shuters, junior; Mrs. Wright was with us; I observed what a quantity of smoke there was in the House; and she said, "Yes, the workmen are below," and there was no observation further took place for some considerable time. We went up towards the Throne, and passed on into the Robing-room, and there was a little smoke there, but not very much. From that we went into the Conference-room and stayed there about five or ten minutes and returned into the Robing-room, and remained there a quarter of an hour in conversation; and then, as we were about to leave the Robing-room, Mrs. Wright invited us to walk into the old Lords' House, which we did; and in conversation going up, one of us observed how cold it was; there seemed to be a raw air. We returned and got back into the House of Lords, and remained about the Throne, and got upon the side of it, and by the Woolsack, and a variety of places, and were there, I suppose, a quarter of an hour. We were then about to go out of the House, and I was attracted by the Usher of the Black Rod's box; I asked what place that was over there? Mrs. Wright then described it, and I went over to it. When I came over very near to the box, I found that the heat was so great, I said, "Bless me, how warm it is here!" I felt it through my boots.

To whom did you make this observation?—Not to any one in particular.

Was Mrs. Wright near enough to hear what you said?—Yes; I immediately put my fingers down to the floor, and held them there for about a quarter of a minute, and said, "I should almost be afraid this would take fire;" "Oh no!" said Mrs. Wright, "it is a stone floor." Mr. John Shuter then went over and leaned over the box, and he said, "Mr. Snell, step over this way and only see what a suffocating heat there is;" "Yes," says I, "there is a very great heat; a suffocating heat;" and Mrs. Wright said, "Oh! the workmen are below burning the Exchequer tallies; and I have known when the House has been sitting, that people that have stood at this spot have almost fainted;" and by her making this observation my attention was taken off altogether from it.

Then you went away?—No, we staid for a quarter of an hour afterwards chatting in conversation; but by Mrs. Wright saying that people had almost fainted by the great heat at the time the House was sitting, my attention was taken altogether from the probability of fire. I never was in the House before, but I thought it a strange thing that there should be so much heat and smoke.

Did you see any smoke proceeding through the floor?—No.

Was the House at that time so filled with smoke you could not see the Throne from the Bar?—That was my observation. I was so much grieved that there was so much smoke in the House I could not see the tapestry, and I went over and put up my hand to convince myself that it was tapestry; but I do not think I saw above a foot square when I was near to it.

Then you went away?—Yes; and did not know anything about it till I saw it in flames.

When you first heard of the fire, did your mind recur to that?—Immediately we told Mr. Shuter of that; directly I heard there was a fire, it flashed into my mind that it must proceed from that spot.

[*The Witness was directed to withdraw.*

Ashburnham Bully, Esq., was called in; and having been sworn, was Examined, as follows.

Ashburnham Bully, Esq.

YOU are an officer of the Exchequer?—I am.

What is the nature of your office?—I am in the Comptroller's Clerk's Office.

Have you been for some time in the service of the Court of Exchequer?—I have been 38 years in the receipt of the Exchequer.

Before the new Bill came into operation, you had been 38 years in the receipt of the Exchequer?—Yes.

Were you in the same department as Mr. Milne?—No; I do not conceive that the auditor, that side of the Exchequer, were in that office; they acted together in the mode in which the original business of the Exchequer was carried on; the one was a check upon the other.

Mr. Milne's department, in which those tallies were, and your department, the receipt of Exchequer, were not the same?—No; the one was a check upon the other.

Their Lordships understand that Mr. Milne's department was abolished in the year 1826?—It was abolished upon the surrender of the patents of Lord Guildford and Mr. Burgoyne on the 10th of October 1826.

Was the tally-room, where those tallies were kept, in that department to which Mr. Milne had originally belonged?—No, not latterly; previously the tallies were kept in the room adjoining, what we call the Tally Office.

Was that the room in which the tallies were last Tuesday?—No.

In which department was that room?—The foils, which were part of the tallies of which Mr. Milne had the charge, were carried to the Star Chamber; they were in the Star Chamber, I think, on Tuesday last; I went with Mr. Eden into the room, and saw them there, I think, on that day.

In whose department was that room?—I conceive that the room was in the department of the Court of Exchequer; that is, the receipt of Exchequer.

Is that the department to which you belong?—No, I do not conceive I belong to that part at all.

Who was at the head of that department?—Lord Guildford was at the head of that department till the year 1826, when the office was abolished by the surrender of that patent.

Since October 1826, when it was abolished, in whose department was the Star Chamber?—I look

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—I look upon it it was in the department of Mr. Milne, who acted as deputy to Lord Guildford.

Before 1826, in what manner had the tallies from time to time been disposed of?—I think that it was about 20 years ago since, under the order of the House of Commons, the foils to which the question alludes were taken by an order, I think from the Chamberlain, into Tothill-fields, where they were burnt under the immediate direction of the then Deputy Chamberlain, a gentleman of the name of Leete; they have been at various times since destroyed; but I have never heard of their having been burnt, they have been usually chopped up; but this I do not know from my own knowledge, but only from that inquiry that I have thought it my duty to make.

Have they ever been burnt in Tothill-fields, except at the time to which you refer?—I cannot learn that they have been; nor have they ever been destroyed under the jurisdiction or order of the Auditor of the late receipt of Exchequer at all; he was perfectly ignorant of them, having got the foils when the Accountant took from him those tallies.

How long is it, in point of fact, since tallies and foils have ever been used in keeping the Exchequer account?—They were used up to the year 1826.

Since 1826, have tallies and foils ever been used at all in the department?—Not the wooden foils nor tallies; not one wooden tally has been necessary since October 1826.

Have the tallies since that been parchment?—Yes, they have since that.

So that those tallies and foils were the remains of the old system of accounts which was abolished in October 1826?—Yes.

What is the difference between a tally and a foil?—The difference is, as well as I can explain it, this: the Accountant has money under the old system paid him into the Exchequer, the Tellers sent his bill to the Tally Writer, who was the Auditor, and the Tally Writer gave his receipt on the receipt side to strike the tally, which was an ash stick cut into two; when the Accountant had received from the Auditor his tally, the counter-foil was sent to the court side to be joined with the same tally previously to the Accountant passing his account before the Barons of the Exchequer or the Auditor of the Imprest; therefore there is a difference, inasmuch as the one is longer than the other.

Will you look at that produced to you?—I am very much out of use of those things, but this appears to be a tally, and the other the counter-foil; I am not quite sure whether the short one is given and the long one retained, but they must join and must be indented before the Accountant can pass his accounts. I wish to be permitted to say, that the late removal of the foils was not consequent upon the change in the Exchequer, it was in consequence of an application made to the Treasury for the room, to convert it into a Court of Bankruptcy.

[*The Witness was directed to withdraw.*

Patrick Furlong, was called in; and having been sworn, was Examined, as follows:

Patrick Furlong.

WHOSE employment are you in?—Mr. Johnson pays me.

Who is Johnson?—Johnson, the paviour.

Is he a contractor with the Board of Works?—Yes.

How long have you been in Johnson's employ?—I have been on and off a good while, these 11 years.

Do you receive your orders from Johnson or Mr. Weobley?—From Mr. Weobley.

But you are paid by Mr. Johnson?—Yes.

You are hired by Mr. Weobley?—Yes.

Are you sure you were not hired by Mr. Johnson?—No, Mr. Weobley.

Had you been employed before that by the Board of Works?—Yes, I worked for Mr. Estall; he had worked for the Board of Works for the last seven or eight years.

Are you a day labourer?—Yes.

What wages do you get?—I get half-a-crown a day, 15*s.* a week.

And no perquisites?—No.

Does Joshua Cross get the same wages?—I cannot tell.

Are you paid by Mr. Johnson?—Yes.

Were you directed by Mr. Weobley to take the tallies from the tally-room, the Star Chamber-room, to the furnace?—Yes.

On Wednesday last?—Yes.

Did you accompany Cross when you did it?—Yes.

How many trips did the truck make to take them?—I cannot tell exactly.

Five or six?—Yes, five or six, I believe; I do not think there were six; I think there were about five.

What directions did Mr. Weobley give you about burning them?—He gave Cross the directions.

Did you not hear them?—No.

Did Cross tell you the directions Mr. Weobley had given him?—No, he did not; he took me the next morning.

Who told you to bring the tallies?—Mr. Weobley.

Did he tell you where you were to bring them?—Yes.

What were you to do with them?—To burn them in the furnaces.

When he told you to bring them, and burn them in the furnace, did he not tell you how you were to burn them?—No, he did not tell me; I suppose he did not know that I was to burn them; but Cross fetched me next morning.

He

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He knew only of your being employed to fetch them?—Yes.

He did not tell you they were to be burnt slowly, a handful at a time?—No, but Cross told me so.

Did he tell you who had told him to burn them slowly?—Mr. Weobley; that they were to be burnt a little at a time, that was the direction he gave me.

When did you begin to burn them?—About half-past six.

Had you the feeding of one of the furnaces, and Cross the other?—Yes.

You were employed by Cross to help him?—Yes, I acted under Cross's directions.

You continued burning them during the whole morning?—Yes.

How many did you put in at a time?—We used to cut the cords off them all, and used to put in a fist full at a time.

Were they damped?—We used to damp them; we kept water there all the time.

In what did you damp them?—In the pail.

How did you damp them?—We threw the water out of the pail.

Did you throw water after you put them in or before?—Before we put them in.

Were the whole wetted before you put them in?—Yes, sprinkled, damped.

When you put in a handful, did it blaze away?—No, not very rapidly, if it did not flame much.

It made a very small fire?—It did not make a large fire.

Could you see the fire a good way off?—We kept the furnace open; we could not help seeing.

Could any body 20 yards off help seeing there was a fire?—I do not think that they would take much notice of it.

There was very little flame, or was there a great flame?—Not much flame.

You put in a handful at a time?—Yes.

How many was a good handful?—I cannot tell exactly how many was a good handful.

Did not you know from Cross how many there were in a handful; have not you been talking to him last night or this morning?—I have seen him about to-day, and I see him here now.

When did you see him before you came in; did not you see him last night?—Yes, I did.

Did not he call on you?—I saw him below, when he came back to his work at the ruins.

When?—Yesterday evening.

Do you work in the same place?—I do.

He came and told you he had been examined here?—He did.

Did he tell you the account he had given?—He did not to me; he told me he was examined, but he did not tell me the account he had given here.

Did he tell you he said he had put in a good handful at a time, and no more?—No, he did not tell me that, I knew it myself.

For anything you know, Cross may have told their Lordships that he and you put in five or six handsful at a time?—Well, I do not know what he said, but that is the way we put them in.

Suppose he has told their Lordships that he put in five or six handsful, and that it made a great flame?—I cannot tell what he has said, but I know he did not put in two handsful at a time, but only one.

Will you swear that Cross never told you a word last night of what he had said yesterday?—He told me he was here.

Did he tell you he was examined?—Yes, he did.

Did he tell you who questioned him?—No, he did not.

Did he tell you how long he was examined?—He did not.

Did he tell you he answered any questions at all about the burning of the tallies?—Oh, I am sure I do not know.

Did you never think of asking him what he was asked?—No, I did not; it was not my business to ask him any questions.

How long did you see him yesterday afternoon, after he was examined?—I do not know; he came to where I was at work.

How long did he stay near you?—He did not stop long.

How many hours was he by when you were at work?—He was not ten minutes, nor three minutes near me.

You mean to swear no conversation took place between you and Cross as to what he had said?—Not a bit.

There was something?—He told me he had been here.

You say not much conversation passed, but what did he tell you he had said?—He did not tell me what he said; and it was not my business to ask him any questions; he merely told me he had been here, and had been examined; that was all he told me.

That you mean to swear; and that he told you nothing else, except, that he was here, and had been examined?—Yes.

And not another word?—That was all he told me.

Did you see him at night again?—No.

Nor this morning?—Yes.

At what hour did you see him this morning; at 10 o'clock?—Before 10 o'clock; about seven, I should think.

Did he know you were going to be examined to-day?—I do not know that he did.

Had you any conversation about it?—No.

When were you desired to attend?—Cross came to me when I was at my dinner to-day, and said, I should be examined; he said Mr. Weobley told him to let me know.

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What did he say you were to come here for?—He did not say that; he merely tapped at my door and went away again.

Is that the whole which passed between you and him the whole of this day?—Yes, it is.

Had you no conversation?—No.

Did you know you were to be examined till he came to you when you were at dinner?—I did not.

Nobody had told you?—No.

Had you no talk with him in the course of the morning about this examination?—No.

And you did not ask him?—No.

You say you put in a handful at a time, did you ever put in a second handful till the first was burnt?—No, not till they were pretty well burnt.

Did he do as you did?—Yes.

You mean to say no wood was put in without being first sprinkled with water?—No.

How did you lay them in to burn them?—With our hands.

Did you put them in carefully, or ram them in?—Just laid them in carefully.

You did not ram them in?—No; they were not very long, they did not want ramming in.

The question is, whether you did ram them in?—No, we did not.

How deep did you lay them; three deep, or six deep?—I do not know.

Are you sure you did not put them eight or ten deep?—I am sure we did not.

Three deep?—I cannot swear how deep I laid them.

Perhaps you laid them only one deep?—Yes; sometimes two or three deep I should think.

Perhaps one?—Perhaps some four deep.

Perhaps five?—No, I think not.

How many inches high did they stand in the furnace, the burning tallies?—Perhaps three inches.

But not more?—No, I think not.

You never put in another handful over these three inches, and never any one till the other was burnt?—No, I do not think we did.

How many parts filled was the furnace with fuel; was it three parts in four, or four in five?—It was not three quarters filled.

Was it two-thirds filled?—I think not.

Will you swear it was not two-thirds filled?—No; because I did not take such particular notice.

You are sure it was above half filled up?—I know it was not half filled up.

How much less than half filled up?—I cannot say, but not half.

More than a quarter?—I do not know the height of the furnace.

Was it ten feet or two feet?—I am sure I cannot tell, I suppose it was two feet.

Was it as high as that (about two feet)?—Yes, about that, I think.

How much of that was filled with the fire?—It was not half of it.

But near half?—No, I know it was not near half.

Do you mean to abide by that you have said, that it was not above three inches deep?—Yes, I think it could not be more than that.

It burnt, you say, slowly, and there was no great flame?—Yes, there was no great flame.

How much bigger than the light of a candle?—It was bigger than a candle, certainly.

As much as three or four candles?—Yes, I should think so.

Was there as much flame as a common kitchen fire?—I cannot say.

Was there as much blaze as that [*burning paper*]?—Yes; sometimes more and sometimes less, but hardly ever more.

There was no draught like a furnace; did you ever see a reverberatory furnace, a founder's furnace, with a flame blowing through it?—I never worked in a foundry.

Did you never see a foundry furnace?—I do not think I have; I have seen a plumber's furnace, which I worked myself.

How was that furnace on which you laid these sticks as compared with the fire there was in the furnace you worked?—The fire I used to have, used to make twice as great a flame as that.

Should you represent this fire as being a very small fire or a very large fire, or a middling fire?—We used to put on a large fire of coals.

The question refers to the fire of wood?—It was a small fire, and it was kept all day a small fire; for we must consider it was a small fire, when it was lighted at half-past six, and it was half-past four before they were burnt.

That depends on the number of tallies there were?—There were not a great many.

Did you ever put your hand on the outside of the furnace, to feel whether it was hot?—No, I did not, indeed, though I might feel it when I was throwing them in.

Did you ever feel that it was hot?—I did not.

Did you ever put your hand on any part of the flue above the furnace?—I did not.

Did you hear any draught going through the door, like the air going through a flame going up?—Yes, I did hear a draught.

Was it a roaring draught?—No, not a great roaring draught; but you must hear a little, of course.

Do you recollect a man of the name of Richard Reynolds; do you know him?—Yes; I have known him for years; I knew him when he was watchman.

Is he a respectable man?—Oh, yes; I know nothing else by him.

Do you recollect his coming that morning between 10 and 11?—I do.

What did he say?—I did not hear the man say nothing in the world in particular. I saw the man come in; he spoke to Cross; what he said I am sure I cannot tell.

Did

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Did you hear what Cross answered?—No, I did not; Cross was at one fire, and I was at the other.

How near were the two fires one to another?—About as far as to the door, or a little better; about that distance, I should think.

You say you did not hear what he said to Cross, or what Cross said to him?—No.

Did Cross tell you, after he was gone away, what he had said?—I am sure he did not.

He did not say Reynolds was afraid of the burning?—No, I did not hear anything like that.

Did a message come down from Mrs. Wright to you in the course of the morning?—No; nobody came in, only Reynolds and his son.

Reynolds came between 10 and 11 in the morning?—Yes, he did.

When did the son come?—He came some time between three and four, I think; I cannot exactly tell the time.

Did you hear what young Reynolds said to Cross?—No; he did not speak to me.

Did you see him in conversation with Cross?—I saw him standing there, but I did not hear him say anything.

Did you see Cross go away from the fire between 10 and 11 in the morning for about a quarter of an hour or 20 minutes?—No.

Did he never leave it for the whole morning?—No, except standing at the door and the like; oh yes, he went up stairs.

Did he go of himself, or did anybody come for him?—He went of himself.

Do you know a person of the name of Jukes?—Yes.

Did not he come down in the course of the morning?—No.

Did you not see Jukes that day?—I declare I cannot tell, without I tell a lie; to the best of my knowledge, he did not come there.

From what part of the country did you come, Ireland?—Yes.

How long have you been in this country?—Eleven years.

You are not sure that Reynolds did not come down and speak to Cross on that day?—To the best of my knowledge, he did not. He told me he would go up and see what was the heat of the House.

Did he tell you he was going up to look at what the heat was near where the flue was?—No.

Did he tell you he was going to look at the thermometer?—Yes, he did.

For what was he to look at the thermometer?—I do not know.

Do you not know what he was going to look at it for?—I do not know.

What is that to tell; is it to tell what o'clock it is?—He told me he would go and see the heat of the House.

Do you know what is the use of a thermometer?—No.

Is it to tell you what o'clock it is?—No.

Is it to tell you which way the wind is?—I suppose not.

Is not it to tell you how hot it is?—I am sure I cannot tell.

What did he say he was going to look at the thermometer for?—Cross told me he should know what the heat of the House was by looking at the thermometer.

Cross said he was going to look what the heat of the House was by looking at the thermometer?—Yes, he told me that.

Did he go away?—He went away.

Did anybody go with him?—No.

Did you see him knock at the door?—What door?

At the door at which he wanted to go into the House?—How could I see that when I was below at the fires.

You might have left your post, and gone to look?—I did not; I stayed near the fires until Cross came back to me again.

What did he tell you when he came back?—He told me there was not much heat about it.

So that you were satisfied that all was safe?—Yes; it never ran in my head there was any danger in the world.

Did he tell you it was 55?—I cannot recollect.

Did he tell you he had seen Mrs. Wright, the housekeeper?—Yes.

Did he tell you what she said to him?—No.

Did he not tell you he had told Mrs. Wright you were acting by orders of the Board; if you were acting by orders of the Board, of course all was right; did not he tell you that he had told her that?—I think he told me that Mr. Weobley told him to burn those things there; that was enough for me.

But he did not tell you what Mrs. Wright had said?—No.

Did he say all was safe, or all was right?—That all was safe, and there was not much heat there.

Did he tell you he had felt with his hand, near the wall where the flue passed?—He did not, indeed.

Did he go afterwards, in the course of the day, to see whether all continued to be right? No, he did not go afterwards.

Did it not strike you that he might as well have gone afterwards, and seen how things were?—It never struck me.

Mr. Weobley came in the course of the day?—Yes, he did.

What did he say when he came?—He told us to feed the fires slowly, and to burn them as safe as ever we could, and burn them all up clean, and to leave none.

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Had you been, when he told you that, putting in four or five handsful, or anything, to make him tell you that?—Certainly not.

Then why did he tell you to burn them safely, when you were doing so; did he not say that is all very right, go on in the same way?—He told us to be particular, and to put them in slowly, and to go on carefully.

He saw what you were doing?—Yes. I suppose if he had seen us doing wrong he would have told us; but he told us to burn them carefully, to burn them all.

And to take care not to set fire to the House?—No, he said no such thing as that.

So as not to heat the flues too much; did he say that?—No; if he said that to Cross, I am sure I did not hear him.

You and Cross considered, that if you did not burn them slowly, and throw water upon them, it would endanger the House?—I never thought of the House; I never thought that if we burnt them ever so strongly it could injure the House.

You and Cross never thought, that whatever number of tallies you put in could make any difference; that it had no connection with the House?—I might think of that; but I never thought of that.

You did not think there was any danger in putting in tallies?—No.

Or that any number could make any difference, or do any harm?—No; Cross told me to put in a few at a time; to keep down my fire, and do the same as I saw Cross do.

Did not you think it did not signify how many handsful you put in; that the House would be none the worse; that there was no danger?—I did not think anything of any danger.

What was the last time Mr. Weobley came to see you?—I think between two and three, but I cannot say exactly; he came after dinner, I know.

He never came again; you never saw him after that there?—No.

Where did you go when your work was over?—We went and had a pint of beer after we had put out the fire carefully, and locked up the place.

What did you do with the key; did you lock up the stove?—Cross had the key.

Where did you go after that?—I went home.

When did you get home?—About six o'clock.

Did you remain at home all the night?—No; I was just having my tea when Cross came and called on me, and said he saw fires round about Palace-yard; and he and I came off as fast as ever we could.

When you got to Palace-yard, you saw it was the House of Lords burning?—Yes.

You said before, you never thought that putting in tallies to any number would burn the House; but when you saw the House was actually burning, did you not think that the burning of the tallies had to do with it?—No, I did not think it; nor I do not think it now.

Did you not, at the time you saw the fire going on, look back to it, and think it had something to do with the flue; recollect you are upon your oath?—No, I do not think, upon my oath, that the fires we had there could do it.

Are you a Roman-catholic?—I am.

Is there a cross on the outside of that book?—No.

Though there is no cross on the outside of the book, you are liable to be punished for perjury as much as if there was?—I hope I shall never be punished for that; I hope in God I shall not.

Recollect the oath you have taken; by virtue of that oath, will you swear that when you saw the fire break out you did not think it had something to do with the burning of the tallies?—Upon my oath, I did not.

What did you say to Cross?—Oh, I cannot tell what I said; a man that is in a fright cannot say what he said.

What did Cross say to you?—I cannot recollect what he said to me.

You have stated your opinion that it had nothing to do with the burning of those tallies; what do you think did set fire to the House of Lords?—I cannot tell that.

Something must have set it on fire?—I cannot tell what it was that set it on fire.

Have you no opinion one way or the other?—No, I have no opinion at all; if I had an opinion I would tell you.

How long did you continue at the fire?—I was all the night at it working.

You and Cross continued working together?—After we had got our things I did not see him any more that night. I was at the Speaker's all night getting the things out as fast as I could, and saving every thing that I could.

[*The Witness was directed to withdraw.*

Joshua Cross, was again called in; and further Examined, as follows:

Joshua Cross.

WAS Furlong by when Mr. Weobley on Wednesday night told you to bring the tallies from the Star Chamber?—He was there with us moving them round.

Was he there when Mr. Weobley directed you to bring them?—I rather think he was.

Did Mr. Weobley give him any directions, or only you?—Only me.

Did Mr. Weobley employ Furlong to burn them, or did you employ him?—He told him on the Wednesday he was to assist me in the burning them.

Did you hear him?—No, I do not know that; it was Furlong told me that Mr. Weobley had told him he was to lend me a hand to burn them.

Did he tell you that on the Wednesday night or the Thursday morning?—On the Wednesday.

What answer did you make to that?—I did not make any particular observation.

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You mean to swear it was not yourself that directed him to help you, but Mr. Weobley, as he stated to you?—Mr. Weobley and he and I were together.

When did Furlong tell you he was employed by Weobley?—Oh, he was employed with me in the afternoon.

Did he desire him to help you the next morning to burn them, or only to bring the tallies?—To bring them and burn them.

Did Furlong tell you that Weobley had ordered him to help you to burn them?—Yes.

When was that?—On the Wednesday.

Was anybody also present but you two?—No.

When did he tell you that?—When he had brought them round.

You saw Weobley after you went away from this place?—Yes, I was at work with him after that.

How long were you at work with him?—I cannot say exactly; I saw him afterwards when I went away.

Two hours?—No, I was not away above half an hour before I was sent for back again.

Did you go back to your work again after that?—Yes.

Did you see Furlong again?—Yes, I did.

How long after you were examined were you in company with him, Furlong?—I should think about a quarter of an hour or twenty minutes; I was not working with him after I went away the last time, but only receiving orders, but he was to go and attend the engine at night.

When you went back you told him you had been examined here?—I did not tell him any thing about it.

Did not you tell him what you had been doing here?—I did not.

Did you speak to him at all?—I did.

About what?—About the work.

But not about your examination?—No.

Did you say you had been examined here?—No, he knew that.

Did you see him at night?—Not after I left off.

When next?—Between six and seven this morning.

At your work?—Yes.

Did you have some conversation about the examination?—No.

Did he speak to you?—Not at all.

Did you know he was going to be called and examined at that time?—No.

Did he know it?—He did not that I know of.

When did you first know of it?—I should think about half-past nine or ten o'clock, when Mr. Weobley sent for me from my working one of the engines, and sent him word he was wanted.

Did you call on Furlong when he was at his dinner?—I did.

For what purpose?—To tell him that Mr. Weobley had sent to say he was to be examined.

Did you not say that you sent to him in the morning?—Yes, that was when the gentleman examined us this morning.

By whom was that examination?—I cannot say, it was a gentleman.

Were you examined in a room?—No, in the street; he asked us a few questions.

Did they ask Furlong any questions?—Yes, they asked him before me.

Did you hear what questions they asked him?—Mr. Phipps was present and kept us separate.

Did Furlong know at that time he was to be called on here?—No, we did not know it.

Were you afterwards sent to him?—I was sent to him when I was going home to dinner; I did not know it till 12 o'clock myself; I went to him and told him he was to be here at one.

Did you tell him about what?—To be examined.

About the fire?—About our burning the tallies.

Had you any conversation with him about what you have said?—No.

Did he ask you what you had been examined to?—He did not.

Did you tell anybody last night or this morning what you had been examined about?—No, except that gentleman I have spoken of.

When you went up to examine the thermometer, did you tell Furlong you would go and see that all was right?—I did.

And you knew that the thermometer was to tell you whether it was hot or cold?—I did not tell him that.

But you knew it?—Yes, I partly knew it.

It stood at 55?—Yes.

Are you aware it afterwards stood at 60?—Not the least.

When the young man Daniel Reynolds came to you, was between three and four o'clock?—It was.

What did he tell you?—He did not make any inquiry about the heat.

Did not he say anything about the heat or the tallies burning?—No; he came in and asked me how long I should be before I was done, and I told him I should be a very little while before I was done.

Was that all that he said?—Yes; he picked up one of the tallies.

He said nothing about Mrs. Wright, or about the heat?—No.

Nor about danger?—No.

Nor smell?—No.

Joshua Cross.

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Or any smother?—No.

When you put in the tallies into the place, it made a very quick fire?—What I mentioned yesterday.

No flame?—Nothing more than would be occasioned by burning wood.

Was it a small flame?—Not a very large flame.

Did it make a noise?—I mentioned it yesterday.

Did it make a noise; as you told the truth yesterday, you will confirm it to-day?—It made some noise.

Did it roar?—Not much.

Did you ever see the furnaces?—Yes.

Was not the fire driving through like a furnace?—Not very strong.

It never occurred to you that there was any danger of fire occurring?—Not the least.

Though you might put on five or six handfuls at a time?—I do not consider that it would.

If you saw the House of Lords was burning, should you not have considered then, that it had something to do with putting the tallies in?—It did strike me that that might be the cause, but I cannot say.

And you mentioned that to Furlong?—Yes, I mentioned to him there was a fire.

You mentioned the tallies perhaps?—I said I hope to goodness it was not by me burning the tallies.

What did he say?—That he hoped the same, that he hoped not.

But still that it might be owing to that?—Yes.

There was no other thing to account for it?—Nothing that I know of.

You had some little chat with Furlong on the subject?—No; for we both ran as fast as we could, as soon as ever I heard where it was, and used the greatest speed to render all the assistance I possibly could, which I did to the utmost of my power two days and two nights.

As you thought there was no risk in any number of tallies you put in, you did not think of damping them?—As I stated yesterday, some I put in I damped, and some others I put in afterwards that I did not damp, and I damped them a few at a time.

You put in for one handful you damped, probably 10 handfuls you did not throw water on?—No, not so much as that.

How many did you damp?—I cannot say.

You did not damp every handful you put in?—No.

Furlong did not damp every handful perhaps?—That I cannot say; for we were at separate furnaces.

Since the night of the fire, have you seen different people, and talked to them about it?—I have been asked questions about it.

What opinion have you generally given as to the cause of it?—I have given a general opinion that I could not tell what the cause was.

But the only thing you could think of was the tallies?—Probably it might be.

Furlong and you have met together?—We have worked together.

You have chatted together, perhaps?—Not much.

Has Furlong expressed that his opinion was the same as your own?—I cannot exactly say what his opinion was.

Has he not told you it might be the tallies, though he hoped it was not?—That he hoped it was not; he has said that.

Within the last five or six days he has said that?—Yes; he has said that.

[*The Witness was directed to withdraw.*

Mr. *William Henry Roberts*, was called in; and having been sworn, was Examined, as follows:

Mr. *W. H. Roberts.*

HOW long have you been employed in the Exchequer?—Forty-four years and three quarters, the 10th of October.

In what department are you?—First Clerk to the Clerk of the Pells.

Are you in the receipt of the Exchequer?—Yes; Westminster Hall.

Nothing was done with your department by the Bill of 1826; your department was not affected by that?—No, I do not think it was.

Their Lordships are informed the burning of the tallies had nothing to do with the new arrangement?—Nothing whatever.

The wooden tallies and foils have been given over to be used ever since the year 1826?—Entirely.

Do you know how the tallies used to be destroyed formerly?—I have not the least knowledge; it was never before me in the least as an official matter.

You do not know how they were disposed of?—I have not the least knowledge.

You do not know that they were ever burnt in Tothill-fields?—I never heard of that.

[*The Witness was directed to withdraw.*

Mr. *William Jones*, was called in; and having been sworn, was Examined as follows:

Mr. *William Jones.*

YOU are a medical man?—Yes.

A general practitioner?—Yes.

Did you attend the family of Mr. Cooper, in Drury-lane?—Yes.

Are

Mr. *William Jones.*

21 October 1834.

Are you attending him still?—I am attending them now.

How long have you known Mr. Cooper?—I have known him from eight to ten years.

And attended his family?—Yes.

Did you see Mr. Cooper last Saturday?—I saw him last Saturday evening, between eight and nine o'clock.

Did he mention to you any incident about the information he got at Dudley?—Yes.

State what he told you?—I asked him if he had heard any thing about the fire in the country before he returned. He said, yes; he heard it pretty nearly as soon as we did in town. Then he told me that he heard of the fire about half-past 10 on the Thursday night; that a gentleman, I believe, came into the travellers' room in Dudley, and stated that the House of Lords was on fire, or that the House of Lords was burnt down, I am uot exactly sure which of the expressions was used.

Did he say in what way it was caused?—No.

Are you sure he said nothing about carpenters or shavings?—No.

Did he say what sort of a man had told him this?—No; that it was in the travellers' room.

Did he say who had told the man?—No.

How he had picked it up?—No.

Did he say any thing more about it?—No, he did not indeed; he never said a word after that, then; but I made inquiries again on the Sunday.

Did you express no surprise?—Yes; I expressed surprise, and he was surprised likewise.

Did he say he had told anybody?—No.

Did he say where he had first learned of the fire having really occurred?—That he heard it afterwards when he came back to Oxford on his way home.

Did he say in what room at Oxford?—No.

Did he say from whom he heard it?—No, he did not.

Did you make any observation?—That I was surprised at the circumstance that he heard it so soon.

How did he account for it?—He would not account for it; we were both surprised how he could hear it so soon.

Did you give him any advice or recommendation?—No.

Did you express surprise he had not told it before?—No.

Had you seen him in the morning?—No; I believe he had not arrived then in town.

Did not he arrive in the morning?—No; not in the morning, I believe.

You consider it impossible he should know the real fact?—Yes; it was more than 30 miles an hour.

Why do you think he came back on the Saturday evening?—I believe he told me he had only just arrived.

What time was that?—It was between eight and nine o'clock.

Do you know Mr. Barron, the builder?—No I do not.

Then you had no further conversation with him?—I saw him on Sunday evening, between six and seven.

Did he recur to the subject?—Yes, I asked him the question, and he stated the same again as he had done on Saturday night.

You have known him seven or eight years?—Yes, fully that.

From what you have known of him during that time, is he a man of sound understanding?—Yes, I believe he is.

Is he in an extensive way of business?—Very, I believe.

Is he a man given to fancies?—No.

Does he believe in witchcraft?—No, I believe not.

Did you ever hear him talk on subjects of that kind?—No.

Does he read books of that kind?— No, I should think not.

There is no insanity connected with the family?—No, I think him a very sensible man.

A man in a thriving way of business?—Yes.

A man well to live?—To the best of my knowledge, he is.

Do you know Mr. Hall, his partner?—Yes.

Is he here?—Yes.

Did he speak to Mr. Hall about this?—Yes, I believe he spoke to me first about it.

Did it occur to you to ask how it was he had never mentioned it to Mr. Hall that morning?—No.

Did it occur to you to advise him what course to take?—No.

Did you on the Sunday evening advise him to tell it to anybody?—No.

You do not recollect that you did?—No, I do not.

[*The Witness was directed to withdraw.*

Mr. *George Hall,* was called in; and having been sworn, was Examined, as follows:

Mr. *George Hall.*

YOU are partner with Mr. Cooper?—Yes.

How long have you known him?—Upwards of 20 years.

When did you first see him after he came to London from Birmingham?—About ten o'clock on Saturday morning.

He had gone there on business?—Yes, to Dudley.

When did he leave town?—On Thursday morning last.

Did you see him on Thursday morning?—I saw him on Thursday morning, before he went away, between six and seven.

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Did he go by the coach?—Yes.

Did he write to you while he was away?—No, he returned on Saturday morning.

Was his original plan to come back on the Saturday?—Yes, his original plan was to come by the day-coach on Saturday, but he came by the night-coach, and arrived in the morning.

You are certain you saw him by ten o'clock in the morning?—Yes.

Did he tell you anything about the fire?—Nearly the first question I asked him was, whether he had heard of the fire? He said he had, and very strange it was; he had heard it a little after ten o'clock the same night in the commercial room at Dudley, where he put up.

Did he say how the man who told him had got the intelligence?—That some person asked the person who gave the information, "was it in the paper;" and he said, "oh no, it was not in the paper, for there was not time, of course, to print it."

Did he say how he heard it?—By a person outside.

Did he say what was the cause of the fire?—I do not recollect that.

Did he say anything about the carpenter or shavings?—Yes, that it was set on fire by some person at work there by some shavings.

That was at ten o'clock on Saturday morning?—Yes, almost as soon as he came in.

Were you present when Mr. Barron saw him?—I saw Mr. Barron with him, but it was not then.

At what time of the day was that?—After the middle of the day, I think he is frequently about there.

Did he tell Mr. Barron then?—I did not hear what passed with Mr. Barron.

Did you give him any advice?—No, I was out of doors nearly the whole of the day.

Did you afterwards recommend to him to tell of this?—I did not.

You have known him, you say, for 20 years; is he a sensible man?—Quite so.

Not a man in the habit of taking up fancies?—Not in the least.

You have never known him take up fancies?—No.

He is a good man of business?—Yes.

Did he say how many persons were in the coffee-room at the time?—No, he said there were several persons in the room at the time this was said. It has been stated, that the fire originated from the flues erected by the Marquis Chambaunes; this is what the Marquis Chambaunes erected for the warming of the House of Lords (*delivering in a book*).

[*The Witness was directed to withdraw.*

Mr. *John Phipps* was again called in; and further Examined, as follows:

Mr. *John Phipps.*

IS there anything you wish to add to your evidence, or to correct it?—Yes; that was in respect to my disobeying orders when I was examined before your Lordships last night; it was the first time in my life I was ever placed in that situation, and under those circumstances I was extremely nervous; I have considered the matter since, and to the best of my recollection I think Mr. Milne did not give me any positive order as to place.

Did you not suggest to Mr. Milne that they should be burnt in the adjoining yard?—I believe I did.

And he approved of it?—Yes.

And he did not say the adjoining yard, or some other convenient place?—I think he did not.

You told Weobley the adjoining yard, without saying any other convenient place?—I think I did.

Have you anything to add to your former evidence?—No.

Have you seen those men, Cross and Furlong, this morning?—I have.

You sent for them?—I sent for them; there was some person came down, I do not know where from, and desired to see those men, and I sent for them.

Who is the person?—I do not know his name.

Whom did he say he came from?—I think in the first place he saw Mr. Weobley.

From whom did he say he came?—He did not tell me whom he came from; he wished to examine those men.

Did you send for the men?—Yes.

Do you generally send for persons from their work at the instance of persons who do not tell you who they are?—I thought he came with some authority.

Did he tell you that?—No.

Was he a messenger of the Board of Works?—No.

You know there are messengers of the Board of Works?—Yes.

Do you put your authority in exercise on the word of a person who does not tell you from whom he comes; did not that strike you?—From what he said, I thought he came with authority; I thought, from the appearance of the man, he came with authority.

What did he do?—He took them up by the Hall near Parliament-street, and spoke to Cross, to a person of the name of Furlong, and to one or two others.

What did he say to Cross?—I do not know.

What did he say to Furlong?—I do not know.

Did he tell you for what purpose this was?—No, he did not.

Or whom he came from?—No.

What made you fancy he had authority to examine those persons; had he anything to do with Bow-street?—Last night I had occasion to go down to the Speaker's House, in consequence,

Mr. *John Phipps.*

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consequence, as I understood, of a watchman having purloined something; I went down and discharged the watchman, and in returning back I called on Mr. Weobley at his house; then he said some person had been there at his house, desiring to see those men in the morning; I cannot positively swear that Mr. Weobley told me he was some person in authority.

The man did not represent that he had any authority from Government?—No.

Was he any person connected with Sir Frederick Roe?—Not to my knowledge; but I trust your Lordships will make some allowance that I am now down at the ruins superintending the shoring-up and taking down the ruins; and my time is so much occupied that I have not an opportunity of giving every thing consideration.

Was not your consideration sufficient to induce you to send any person about his business, unless you knew under whose authority he was acting?—I am sorry if I have done wrong.

[*The Witness was directed to withdraw.*

The following Letter was delivered in by the Lord Chancellor, and read.

"My Lord, "86, Eaton-square, Oct. 21, 1834.

"In consequence of the late event which has taken place, I think it due to myself and the officers of the House of Lords to state to you, for the information of His Majesty's most honourable Privy Council, that being aware of the danger that might arise from the alterations making in the House of Lords, I have particularly cautioned the resident door-keepers and watchmen on the subject of fire; and had, a month previous to the accident, issued fresh instructions to the watchmen, a copy of which I enclose.

"The deputy housekeeper, with her assistant, was considered responsible for the safety of the House during the day; and new keys had been given to the persons residing in the House, and no strangers were admitted without their knowledge; and I trust their Lordships will be satisfied, that, though it was impossible to foresee the causes from which this calamity has arisen, that every precaution was taken by myself and the officers of the House to prevent it.

"I have, &c.

"To the Lord Chancellor. "*Aug. Clifford,* Black Rod."

"Orders to be observed by the Watchmen of the House of Lords:

"Two of the four watchmen, appointed by Black Rod, are to be on duty every night throughout the year, and to take their attendance alternate nights. One in the Lobby adjoining the Peers' entrance, and the other in the Lobby adjoining the entrance from the House of Commons.

"They are to be on duty from Lady-day to Michaelmas, from ten o'clock in the evening to six o'clock on the following morning; and from Michaelmas to Lady-day from nine o'clock in the evening until seven o'clock on the following morning.

"They are, on no pretence whatever, to absent themselves from their duty within the walls of the House.

"They are to perambulate the lobbies, staircases, passages and rooms, particularly where fires have been made, once, at least, in every hour during the night, within their respective stations; viz. the watchman stationed in the Lobby adjoining the Peers' entrance taking the whole of the buildings, including the Parliament offices, from the Chancellor's staircase, above and below, towards Cotton-garden; and the watchman stationed near the entrance from the House of Commons, taking the House, the Robing-room, and the whole of the remainder of the buildings, above and below.

"They are to meet in the Lobby adjoining the Library, for the purpose of reporting to each other that all is safe, at least twice in the course of the night; viz. at twelve and at four o'clock.

"They are to have their lanterns and keys of communication always at hand, and to be ready to give notice, first to the resident door-keepers and deputy housekeeper, and afterwards to the police without the House, in case assistance should become necessary, either from fire or other cause.

"They are to receive from the deputy housekeeper, upon their coming on duty every night, keys of the entrances to the House, as well as of the several rooms which they are to visit during the night, and to return such keys to the deputy keeper upon their leaving duty every morning.

"House of Lords,
September 20, 1834." "*Aug. Clifford,* Black Rod."

Mr. *Richard Weobley,* was again called in; and further Examined, as follows:

Mr. *R. Weobley.*

DID any person come to you last night to inquire with respect to the names of the persons who had given evidence before the Council?—Yes, last night.

Do you know who that person was?—I do not.

Do you know who sent him?—He said Sir Frederick Roe sent him; he addressed me in this way; he was just at my door as I was going home, about seven o'clock; from seven to eight o'clock; he was just speaking to Mrs. Weobley at my door; a very respectable man, a stout man; he said, "I should be glad to ask you a question; I have been in company with Sir Frederick Roe this afternoon, and he wishes me to ask you who the men were who took the sticks from the Tally-chamber to the stove, where they were burnt;" and I told

Mr. *R. Weobley.*

21 October 1834.

I told him Cross and Furlong, and a man of the name of Kirby; three of them carried them, but only two of them had to do with the burning of them.

Did Sir Frederick Roe give you reason to suppose, when you saw him in the Anti-chamber, that he was going to send a person to you?—No, he did not.

Are you aware that this morning a person came for the purpose of examining or speaking to you upon the subject of that examination, those two persons, Cross and Furlong?—That is the same man who was here last night; when I gave him directions on paper, he said, "That he should like to ask some questions; that he was ordered to do so by Sir Frederick Roe." When I got back at nine o'clock, I sent for the three men, and a man of the name of Hook, a carpenter; I do not know what he said at that time to him; he asked him a few questions. I considered that I was doing nothing but what was perfectly right. When he had done, he came round and said, "Mr. Weobley, I am very much obliged to you; I dare say it will be quite satisfactory to Sir Frederick Roe;" and that was all.

You know that the person who asked the questions of this man was sent by Sir Frederick Roe only, as he told you?—Yes, he told me so; that he had been in company with Sir Frederick Roe, and he said that I could tell him the names of the men.

That was last night?—Yes.

You saw Cross and Furlong in communication with this person?—Yes, I did.

You do not know who he is, except inasmuch as he told you he was sent by Sir Frederick Roe?—Precisely so.

With respect to the character of those two men, Cross and Furlong, both have been for some time under your inspection?—Cross was there before I was there; I do not know how many years. The man Furlong has been there but a few months, but he appeared to me to be a good steady man. We some time ago wanted watchmen, and this man made reference to the character of his master, and he gave him a very good seven years' character, that he was very sober, honest and industrious.

[*The Witness was directed to withdraw.*

THE following STATEMENT, prepared by direction of their Lordships, was delivered in by Sir *Robert Smirke.*

"The stove on the west side of the House of Lords stands in the basement story, nearly under the Usher of the Black Rod's seat, the fire in the stove being not less than eight feet below it. The size of the flue is 14 inches wide and 18 inches deep, and its length from the stove to that part nearest to the Usher's seat is about 30 feet, and at that part it passed within about 15 inches of the floor, under the seat. The effects of an extraordinary degree of heat in the flue are seen at a considerable distance beyond the part nearest to the Usher's seat.

"21 Oct. 1834." "*Robert Smirke.*"

[Adjourned.

Wednesday, 22 October 1834.

John Jukes was called in; and having been sworn, was Examined, as follows:

John Jukes.

22 October 1834.

ARE you in the employ of the House of Lords?—Yes.

What is your station there?—To do the matting.

Had you the care of the matting?—Yes.

Were you there on Thursday morning last?—I was.

At what time did you go there?—I was there about half-past eight o'clock in the morning.

Did you see Mrs. Wright soon after that?—No.

When did you first see her?—I saw her about four o'clock in the afternoon.

Not till four?—Not to my recollection.

Did she send any message by you to the men who were at the furnace?—No.

Did you go to the men at the furnace?—No, I did not.

Were you at the furnace at any time in the day?—I was not.

Did she desire you to pull up any matting?—The bump.

What is that?—Canvas on one side, and paint on the other.

Is that over the matting?—No.

Does the bump rest upon the planks of the floor?—Upon the stove against Black Rod's box; it is all stone.

Did you pull it up?—I did.

What did you find?—I found it was very hot; the bump was.

Did you feel the stone?—I did not.

How far from Black Rod's seat did you perceive this?—About two feet.

Did you feel it hot through your shoes?—Yes.

Did you put your shoes on the stone or the bump?—On the stone as well as the bump.

Was it so hot you could not remain there?—I could not hold my hand on the bump.

Did you make use of any expression to Mrs. Wright about it?—I told Mrs. Wright that it was rather dangerous, and she said "yes, it was;" and that she had sent to Mr. Weobley's men in the course of the day several times, and they had not attended to it, and she said she would write off to the office about it.

To

John Jukes.

22 October 1834.

To what office?—To the office of Woods.
To the Board of Works?—Yes.
Did she write?—I cannot tell that.
Did you see any sweating?—Yes.
What do you call sweating?—It was all wet, the bump was wet underneath.
Was that owing to the heat?—Yes.
Was that confined to the place near to the flue?—Yes.
Did you go away from that place?—I went away to the Parliament Office, I had some men at work there; when I came back again, I came back through the House. I locked up my tools, and then went down to the Law Courts.
Did you do anything?—Not then.
Did you give any information?—No.
You say you did not do anything then; when did you do anything?—About a quarter past six, when the fire broke out.
You were never sent with any message, and never saw the flues?—No, it was Mrs. Wright's boy was sent; she sent the boy.
Did you hear her send the boy?—Yes.
When did you hear her send the boy?—At four o'clock.
What message did she give him?—She told the boy to go down to Cross.
Did she say to him go down, or go down again?—I do not recollect that she said go again.
What message did she give him?—She told him to go down and tell Cross she was afraid there was something wrong, that the heat of the House was such she could not stand it; likewise she could not stand on the bump at the bar.
Was that all she said?—That was all I heard.
Was there a smoke in the House?—There was a little smoke.
Was there only a little?—It was not a great deal.
Was it so thick you could not see the throne?—No.
Was it so thick you could not see the tapestry?—No.
Did you observe the throne and the tapestry?—Yes.
Did you take notice what o'clock this was?—About four o'clock.
Had you not been there before?—I had been in the House.
Had you observed the smoke before?—No.
It was then that Mrs. Wright desired David Reynolds to go down?—She did.
Did you stop till he came back?—Yes.
Did he come back alone, or with anybody?—He came back alone.
What did he say to Mrs. Wright?—He said that Cross said they should not be above an hour, they had not many to burn, and he would see that everything was safe; that Mrs. Wright need not put herself out of the way about it.
Did Mrs. Wright say anything more?—I do not recollect that she did.
After that did Mrs. Wright appear satisfied, or did she say she should inform the Board?—She appeared rather dissatisfied, but I do not recollect any remark made by her.
Did you go away then?—I did.
You know nothing farther that passed?—No, not until the fire broke out.

[*The Witness was directed to withdraw.*

Thomas Stuchbury, was called in; and having been sworn, was Examined as follows:

T. Stuchbury.

ARE you guard of a coach?—Yes.
Which coach?—The Shrewsbury Union Coach.
Were you the guard in charge of that coach on Friday night last?—Yes.
Were you the guard on Thursday?—No.
When did you take charge of the coach?—At ten o'clock on Friday morning at Shrewsbury.
You came from Shrewsbury in charge of the coach?—Yes.
Did you come to Dudley?—No, to Birmingham, through Wolverhampton, Bilston and Wednesbury.
Did you take up a gentleman of the name of Cooper, a founder in Drury-lane?—I took up a gentleman at the King's Arms in Wednesbury; he paid his fare to Birmingham first, and then he says, "Guard what is your fare to London?" Ten shillings; he said, "I will proceed on to London," after I had set him down in the Hen and Chickens yard in New-street, Birmingham.
Do you know his name?—No, not exactly.
Had you any conversation on the top of the coach?—No, he was sitting behind, and in Oxford it was the meeting of Christ Church; and some of the collegians said to me in Oxford, "Well, Stuchbury, you will not be in time to see the Lord Chancellor's wig on fire." I told them I had heard something of it in Birmingham.
At what hour was this?—This was at 11 o'clock on Friday night; I set down 14 collegians for Christ Church from Shrewsbury and Birmingham. I brought on two to London; two that came with me from Birmingham.
Did you hear in the course of this conversation about the fire, one of the persons you brought, who paid on his fare to London, say anything of his having heard the story before?—I picked up five other gentlemen at Oxford; I asked one of them whether it was true

T. Stuchbury.

22 October 1834.

true; he told me it was, and this gentleman made answer and said, "I heard of it in Birmingham;" I said, "I heard of it, but it was merely rumour in Birmingham."

What did he tell you he had heard?—That he had heard both Houses of Parliament were burnt down.

Did he say both Houses?—Yes.

Did he say where he had heard of it?—He said he had heard of it in Birmingham.

Did he say when he had heard of it?—No.

Did he say when he had been in Birmingham?—He had been in Birmingham with me; I was in Birmingham three quarters of an hour.

Did you understand him to say he had heard it in Birmingham at that time or the day before?—He did not say anything about the day before.

Did he say anything about its being very extraordinary?—No.

Should you know the gentleman, if he was here?—Yes.

Were there any other gentlemen present who told you of any extraordinary quickness with which the news had come down?—No; the first intelligence of the fire in Birmingham was, the clerk writing at the bottom of the Holyhead way-bill, as I understand, "both Houses of Parliament are at this moment on fire;" that was the Thursday night's mail, which reached Birmingham at seven o'clock on Friday morning.

You say you yourself had heard a report of it at Birmingham; when did you first hear of the fire at all?—It was reported in Birmingham.

When did you leave Shrewsbury?—At 10 o'clock on Friday morning.

Had the news come to Shrewsbury?—No.

How far is that from town?—One hundred and sixty-eight miles by Oxford; it was there an hour after I left it by the Holyhead mail.

Did you meet the Holyhead mail?—Yes.

Did they give you any notice of it?—No, the first I heard of it was in Birmingham.

When did you arrive there?—At three o'clock on Friday.

Where did you hear of it?—In Carr's-lane.

Did all the people upon the coach know it as you came along?—No, and I thought it was only a mere joke from the ostler at the Albion; I never mentioned it to any passenger till I arrived at Oxford, and then some of the collegians were talking to me, and I mentioned it to the passengers whom I took up; I said was it so, and they said, "It is quite correct, you may rely on that;" and this gentleman said, "Oh, I heard of it at Birmingham, to a certainty."

Was the place where you took up this person between Dudley and Birmingham?—Seven miles below Birmingham, and four from Dudley.

Is it near Bilston?—Yes, there is no other coach comes near that road except our's.

The people at Oxford believed the news?—Yes, it was authenticated there.

Did you go to the coffee-room or any public place in Oxford?—There were a hundred collegians at the Roebuck in the corn-market waiting there.

What were they waiting for?—They had made a mistake of a week, they came a week too soon; and they came to meet the coach, to see who were fortunate enough to stop a week longer in the country.

When did the person you took up at Wednesbury first mention it to you?—He never mentioned it till we were coming down the High-street at Oxford; I mentioned it, that some of the collegians had been telling me of it, and he said, "Oh, I heard of it at Birmingham."

But he did not say that he heard of it at Dudley?—No, we do not go within four miles of Dudley; there is no London coach which does.

How far is Dudley from Birmingham?—Ten miles; Wednesbury is seven.

This gentleman, whoever he was, never said a word to you about this till the discussion took place at Oxford?—No.

And the collegians you had brought there appeared to know nothing of it?—No; I thought it was a mere joke: I had taken up five other gentlemen at Oxford to come to London, and I mentioned it to them.

Did this gentleman talk of his having heard of it in reference to his having heard of it in an unusually short time?—No, only that he had heard of it at Birmingham.

He did not speak of it as if he had heard of it in any particular manner?—No.

He did not say who told him, nor how he had heard of it?—No, only that he had heard of it at Birmingham; it was a passing report, as I understood.

Do you come down the whole way to London?—Yes.

Where did he get down?—I think at Regent Circus, at our coach-office. I rather think, indeed, he got down at the end of Fetter-lane, when I come to think of it.

Did he say where he was going?—No, he did not.

Did he call a coach?—No.

Did he walk away?—Yes; he had no luggage, merely a blue gown.

Have you the way-bill with you?—No, I deliver that in at the Bull and Mouth.

You do not remember whether any particular name appears?—I believe his name appears as a gent.; there was another passenger came on from Birmingham to London, that I thought was going to stop at Oxford; as the London fares are less than the Oxford fares at the present time, I would not deny his riding on to London.

What is the size of the gentleman you took up at Wednesbury?—He is a person about my own size.

Did he say where he had been?—No; but he had been somewhere, because it had been raining very heavy, and his cloak was wet, and his hat rather wet, as if he had been five or six miles in the rain.

Did he say when he left town?—No, he did not. *T. Stuchbury.*

You did not hear, from any of the passengers on the outside of the coach, that he had said he had heard it in any particular manner?—No; every one of them were collegians; they came from different parts of the country, except this gentleman and another gentleman I took up in Birmingham, who booked on his place to Oxford, and when I came on to Oxford he said he had booked his place on to London. 22 October 1834.

Did you sit near this gentleman who came from Wednesbury?—I was with him the whole of the way; he sat just opposite to me at the back of the coach the whole way; there were very few words passed.

Was there any other gentleman, except collegians and this man?—One other of the name of Stapleton, he was in front of the coach.

Did any one come with you to London who had come from Birmingham, except collegians?—This gentleman was the only one I had got secure on to London till I got to Oxford, then one said he had booked his place on to London. I set down 14 in Oxford, and took up five to London.

From Birmingham to Oxford there were only two who were not collegians?—Only two; one gentleman like a discharged gentleman's servant, the other gentleman appeared like an iron-master.

[*The Witness was directed to withdraw.*

[Adjourned to To-morrow, at Twelve o'Clock.

Thursday, 23 October 1834.

Mr. *James Minion Cooper* and Mr. *Thomas Stuchbury*, were again called in, and further Examined as follows:

(*To Mr. Stuchbury.*)—IS that the gentleman who came with you by the coach?—Yes. Mr. *J. M. Cooper*, and Mr. *T. Stuchbury.*

(*To Mr. Cooper.*)—Do you recollect the guard?—Yes.

Where did you get upon the coach, at Wednesbury?—Yes, I mentioned Bilston, but it was at Wednesbury. 23 October 1834.

At what hour did you get upon it at Wednesbury?—I think about half-past two.

On the next day after you had left town?—Yes.

How far is Wednesbury from London?—I cannot say.

Had you heard any reports of the fire at Bilston?—No.

From eight o'clock at night, when the mail leaves London, to two o'clock the next day, it might have been heard at Bilston?—(*Mr. Stuchbury.*) The mail reaches Bilston at a quarter before nine in the morning.

(*To Mr. Cooper.*)—When did you first mention this circumstance to any one connected with the coach?—After we had got through Oxford.

The first person you mentioned it to was Mr. Stuchbury, the guard?—Yes.

As nearly as you can recollect, state what the subject of the conversation was which led you to mention that?—A fresh passenger got up at Oxford. He was relating the circumstance to the guard, of the Houses of Lords and Commons being burnt down. The guard said he would not believe it. I said, "it was a matter of fact, for I had heard it at Dudley." The guard said he would not believe it.

You did not mention having heard it at Birmingham?—No.

(*To Mr. Stuchbury.*)—Your recollection was, that he said he had heard it at Birmingham?—I will not be certain whether it was Birmingham or Dudley.

(*To Mr. Cooper.*)—Did you mention it merely to settle the point, whether the story was true or not; or did you mention it to show in what a very extraordinary quick time it had come from London?—That was my intention. Nothing was said about extraordinary quick time; for it was not till I reached Oxford that my mind was affected with that.

You went from Birmingham to Dudley, and from thence to Bilston?—To Wednesbury.

Did you go back to Dudley?—No.

You were never at Dudley on the morning of Friday?—I breakfasted at Dudley, and left it, in the first instance, at eight o'clock, or a few minutes after, to go down to the Old Butterley Iron Works. I then went to Netherton Iron Works. I then returned to the Bush at Dudley again, and paid my bill.

About what time; 11 o'clock?—Yes.

Did you mention this strange circumstance, that you heard the night before, at Butterley or Netherton?—No, I did not; it was a mere rumour.

You returned to Dudley again about 11 o'clock?—Yes; I left Dudley about a quarter past 11.

Were you at the Bush Inn then?—Yes.

Were you in the Travellers' room?—Yes.

Did you sit in the morning at the same table at which you had sat the night before?—Yes, I breakfasted at the same table at which I had had my tea the evening before.

Did you see the same travellers again?—No, I saw two of them.

Was one of them the man who had gone out, and come in with the intelligence?—No, I think not.

Should you recognise either of them again?—I think I should recognise, not the one who brought in the information, but the one who asked the question.

Mr. *J. M. Cooper*, and Mr. *T. Stuchbury*.

23 October 1834.

You are not sure whether they were there in the morning?—I am confident the man who asked the question was not there; but I am not certain that the one who brought the information was not.

Then, for anything to the contrary, the man who brought the information in, and who, you say, appeared to be a traveller, might be there at night and morning too?—Yes.

Do you know whether the Royal mail coach had arrived at Dudley before 10 o'clock that morning?—I think it had, because the evening newspaper lay on the table unopened.

(To Mr. *Stuchbury*.)—What is the distance of Dudley from London?—119 miles; it is 10 miles from Birmingham. There is no mail through Dudley; it is a cross mail from Birmingham.

The letters would reach Dudley by nine o'clock the next morning, would they not?—As nearly as possible; they are dispatched from Birmingham to Dudley at half-past seven.

Then they would get to Dudley before nine?—Yes, between eight and nine o'clock.

(To Mr. *Cooper*.)—The paper, you say, lay unopened; had nobody opened it?—The wrapper appeared to have been slipped off, but the paper unopened. I took it up; but, knowing I had a great deal of business to attend to, I threw it down again.

This man having told this story the night before, according to your recollection, though you did not give it much attention, you say two of the people who had heard it were in the same room the next morning, with the paper lying on the table, which might have contradicted or confirmed it; was not it extraordinary they should not have taken up the paper, and looked at it?—Not at all; for I think they had just got out of bed when I left at nine o'clock.

You came back again?—Yes; but I do not know who was there when I came back. I called for my bill, and paid it, and went away. I did not stay there at all at that time. I am not aware who was there. I do not know what paper it was; but I saw a newspaper.

You were a quarter of an hour breakfasting probably?—Thereabouts.

What were the other persons then engaged in?—One was breakfasting with me, and the other was just come down.

(Mr. *Stuchbury*.)—The only news of the fire was by a note at the bottom of the Holyhead way-bill: "At this moment both the Houses of Parliament are in flames;" there was no account by the newspaper till the Bull and Mouth coach to Shrewsbury that left in the morning that reached Birmingham at half-past four o'clock in the afternoon; I believe there was a note to the same effect on the back of all the way-bills that went out on Thursday night, after the passengers entered on the way-bill; at the bottom of that way-bill, if there is anything very particular, they put it, so that the parties connected with the coach establishment know it earlier than any other persons.

It would not be on any way-bill that accompanied the post to Dudley?—No; the way-bill went to Holyhead.

The news was in Birmingham at seven o'clock in the morning?—Yes; merely from the memorandum of the clerk; the clerks at the Bull and Mouth did the same with the mails going out from thence.

(To Mr. *Cooper*.)—Supposing a person at Birmingham on the Friday morning that had seen a passenger by the mail-coach which had come down on Friday morning, no paper could have come, but a passenger could have brought the intelligence?—He could.

Independent of the chance of his seeing it on the way bill?—Yes.

Might not that man have come from Birmingham to Dudley, and been in the room at breakfast at the time you were breakfasting, and while you were having your breakfast in the morning, might he not have said on that morning, "the House of Lords is burnt down; I had it from a passenger by the coach?"—He might have said so, but that was not the fact; it was on the Thursday evening.

On your way did you dream at all of this affair; did you sleep on the top of the coach?—No; I sometimes nod; but I never sleep on the top of a coach.

Did you not during the whole of your journey to town, till you saw Mr. Jones or Mr. Hall, your partner, mention to anybody with what a miraculous quickness it had come down?—The first person I mentioned it to was my partner. I have before stated that I did not recollect the time at which I stated it; it was on Saturday morning between nine and ten.

But you did not mention that to Mr. Stuchbury or any passenger?—There was only one passenger behind the coach besides myself.

Nothing was said about the extraordinary quickness?—No.

[*The Witnesses were directed to withdraw.*

Mr. *James Minion Cooper*, was again called in; and further Examined, as follows:

Mr. *J. M. Cooper*.

YOU know that Dudley is 119 miles from London?—Yes.

You know that news could not travel in three hours to Dudley?—I do.

When you first heard this you did not pay much attention to it?—No.

When you afterwards heard there had been a fire, your attention was excited to it?—It was.

When you heard there had been a fire, did you hear it had been on Thursday night?—No, I did not.

Where did you first hear it had been on Thursday night?—At Oxford.

When you heard it had been on Thursday night, was it then present to your mind that on that same Thursday night, which was the night before, you yourself had heard of it three hours afterwards at 119 miles distance?—Yes, it was; and very forcibly.

At Oxford therefore did you feel what an extraordinary coincidence had been between the story you had heard and the event?—Yes, I did.

And that it was all but miraculous?—Yes.

Did

Mr. *J. M. Cooper.*

23 October 1834.

Did you exclaim anything again, so that anybody might hear you when you heard the fact?—The only person in the room at the time was the waiter; for the room was filled with collegians. I went into the travellers' room: the waiter says, "Have you heard the news?" I said, "What news?" He said, "that the Houses of Lords and Commons is burnt down." I said, "I heard it last night." I said, "When was it?" He said, "At seven o'clock last night." "I said, if that is true it must be the work of an incendiary, for I heard it within three hours' time."

You made this observation to the waiter?—Yes; but during the latter part of the observation the waiter was going out of the room.

The waiter at what house?—At the Roebuck at Oxford; but I am quite clear of what I heard at Dudley. The matter connected itself in my mind with this circumstance; about 16 years since I was foreman to the Marquis Chambaunes; we were then warming the House of Commons; Mr. Lee, the Clerk of the Works, was very particular with us, and was constantly coming to us, seeing that the fires were kept safe; he was perpetually urging that there should be no neglect about the fires, which I promised him should be attended to. After one time that he had been pressing us to look particularly to our fires, an observation was made by some one present, that a person who was named would not mind 1,000*l.*, or a large sum of money, I forget which, if the place was burnt down, that he might have an opportunity of rebuilding the House of Commons; and I understood afterwards he had submitted several plans. When I heard this at Dudley, it flashed across my mind instantly, if this should be a matter of fact, that person, if he is living, may yet have his wish gratified.

That might have flashed across your mind in the morning as well as the evening before?—Yes; but I am quite positive it was in the evening.

Is there anything else which makes you certain it was in the evening?—Yes; there was one of the travellers, not the person who brought in the information, but the person who made the inquiries, was a humourous sort of a man; he was relating some nonsense he had had when on the top of the coach with a lady; her bonnet was blown about, and she complained that she was much troubled with the wind; and he said, he thought old people were troubled with the wind, and he was himself; but that was a matter of no consequence, as there were only gentlemen present. I did not see that person in the morning.

Did you see any person with slippers on in the morning?—I believe they all had their slippers on when they came down.

Do you recollect going to bed soon after you heard this?—Yes; I think it was about 11 o'clock when I went to bed.

Did you read anything after you had heard this?—No.

In the interval between the hearing of it and the going to bed, did you converse upon it?—No.

Did they continue to converse upon it?—No.

When you went to bed did you think of it again?—No, I did not; it appeared to me at that time a matter of rumour merely.

The next morning when you went on your journey, did not you think of it again?—No, I did not.

Did you not mention it at either of the iron-works you were at?—No.

Did it ever pass through your mind again till you heard of it again?—No; I did not think it was true till I heard of it in Oxford, then I was astonished.

What did you say to Stuchbury about that; did you express your surprise at the shortness of the time?—No; when the guard expressed his surprise at it, I said that I had heard it at Dudley. I beg to say, that I shall be perfectly willing to go down to Dudley with an officer or messenger, if it is wished to obtain any explanation which can be given.

Did you return to Dudley a second time?—Yes; after I left Dudley after breakfast I went to the two iron-works I have mentioned, and returned and paid my expenses, and went to another place, and hired a gig and went on.

Do you know by name either of those persons who was in the room with you?—I do not.

The people at the inn would know them probably?—Yes; I think both the person who brought the information and the person who asked the question were well acquainted; I am quite confident I could recognise the person who made the inquiry.

You arrived at Dudley on the Thursday night, slept there, and of course were there in the morning; you started from Dudley in the morning to those iron-works, and returned back in the course of the day to Dudley?—I think, a little before 11.

You paid your bill, got a gig, and were no more at Dudley?—Just so; I took a person with me from Dudley to bring back the gig.

You now think you would know the man who told you?—Not the man who brought the information, but the man who made the inquiries whether it was in the paper.

You say you mentioned it to the guard; was there any conversation between the guard and you, or between any of the other passengers on the coach and you, in coming from Oxford to London, with respect to the extraordinary quick time within which the news had arrived?—No, I do not think there was.

Nothing to show that you were surprised at its quickness?—No, there was nothing that I recollect, only with the waiter.

When you were first examined, you were asked, "Did you mention this extraordinary coincidence to the guard?" your answer was, "One of the other passengers mentioned it to the guard, and the guard said, he would not believe it; and I said, it was a fact, and that I had been informed of it on the Thursday night at Dudley;" did that refer to the guard of the Union Coach?—Yes, that is quite correct; the guard said, he would not believe it, when I mentioned it, as well as the other passenger.

Mr. *J. M. Cooper.*
23 October 1834.

You were asked whether you mentioned to the guard the extraordinary coincidence, namely, that of the news having come down sooner than any man could come down from London, and related what had passed in London: the inference from your statement would be, that the passenger had said, here is an extraordinary circumstance has occurred to this gentleman last night; for he heard at Dudley that which was passing in London the same night?—It was not mentioned in that way certainly.

Are you sure that you said to the guard, that you had been informed of it at Dudley on the Thursday night, or only that you had been informed of it at Dudley, which you might have been after the news arrived?—I believe I said that I was informed of it at Dudley on the Thursday night.

That was telling the guard of a pure miracle?—Yes, the guard stopped me short by telling me, that he would not believe it.

Did you tell it to your partner or to Mr. Jones first, on the Saturday?—I told it to my partner first, but it was not on my first coming in; I did not see my partner when I first came in.

Did you see him in the morning?—Yes, but not immediately on my coming in in the morning.

On the former day you were asked, whom did you see first after you came home to London, and you said, "I believe I saw my partner first, but I did not mention it to him; I was very tired and wanted a little rest?"—I believe your Lordship asked me when I saw my partner.

That does not appear to be in answer to any question you were then asked. "You went to bed;" to which you said, "No, I was obliged to go out. I saw Mr. Barron, but I did not mention it to him then; but I mentioned it first to a medical man of the name of Jones, who was attending my family; he called upon me yesterday, and said, he thought I did wrong in not communicating what I had heard." Is that correct?—That was wrong; I mentioned it first to my partner.

But that was not the first time you saw him?—No, but afterwards.

It was not Mr. Jones who told you he thought you were wrong in not mentioning it, but your partner?—No, it was Mr. Jones who said that to me.

Are you sure that you mentioned to the waiter, that it must be the work of an incendiary; that the word "incendiary" was mentioned by you?—I mentioned that myself.

The question was put to you, "When you first heard of this was at Oxford, you heard that the House of Lords had been burnt?" To which you replied, "Yes, when first I heard it mentioned was at Dudley; the next was at Oxford." "Who told you of it?" To which you replied, "The waiter at Oxford told me of it." You were then asked, "What did you say?" To which you replied, "I said I had heard of this at Dudley. He said, indeed, how could that have been. I said I was surprised myself, for I did not see how it could come down. He told me, that it had broken out at seven in the evening. I told him I heard of it at ten." Is that correct?—Yes, that is correct. The observation arose from myself, that if it had broken out at seven o'clock it must be the work of an incendiary, for that I heard of it at ten.

You forgot that when you were first examined?—Yes, I did.

You feel quite certain that you told the guard, or the person near him, that it was at Dudley and not at Birmingham you first heard of this?—Yes, I am quite positive of that.

[*The Witness was directed to withdraw.*

Mr. *Thomas Stuchbury,* was again called in; and further Examined, as follows.

Mr. *T. Stuchbury.*

WHEN you were first examined, on being asked whether you were sure that Mr. Cooper said he heard it at Birmingham and not at Dudley, you said you were sure it was Birmingham; has anything since occurred that has made you less sure?—I will not be sure whether he said Birmingham or Dudley; but it was a momentary thing; there were not 20 words.

Did he tell you he heard it on the Thursday night; "I have heard it last night at Birmingham?"—No, I understood him to say, "Oh! that is true enough, for I heard it at Birmingham."

Not last night?—No, he never mentioned anything about last night.

If he had said I heard it last night at Birmingham, would not it immediately have struck you that it was impossible; would not that have excited your attention?—Yes; but it was very near midnight; the passengers frequently make mistakes about midnight; it was as near 12 o'clock as possible; frequently they make mistakes of that sort.

Did you know that Mr. Cooper came from Dudley, when taking him up at Wednesbury?—No, he never mentioned to me where he came from; he had been out in the rain, evidently; his hat and his cloak were wet when he got on the coach.

Your impression is, that he said Birmingham?—Yes, that is my impression.

[*The Witness was directed to withdraw.*

Mr. *Thomas Hinxman Gale,* was called in; and having been sworn, was Examined, as follows:

Mr. *T. H. Gale.*

WERE you at the fire on Thursday last?—I was.

In which street were you?—In the street to the right: Great George-street.

Had you any conversation with a person there?—No, I had not.

Did you hear any one say anything?—Yes; he appeared to be a mechanic.

Mr. *T. H. Gale.*

23 October 1834.

To whom was he speaking?—He was speaking to another mechanic; there were three persons in conversation together.

About what time was this?—About 12 o'clock at night.

What did this man say?—That about 12 o'clock in the day he was told, in St. John's Wood, that the House of Lords was on fire.

Was that all?—Yes. It was observed by the man he was speaking to, that he mus be cautious what he said, because, I believe his term was, that he would be in quod; it was some slang word; I think that was the word; that he would get into quod, I think, or something to that effect.

You never saw the man before?—No.

Nor since?—No, nor should I know him if I did see him; I take him to have been a mechanic, from his dress.

There was no other conversation took place?—Nothing more.

[*The Witness was directed to withdraw.*

James Pulman, Esquire, delivered in the following Paper, which was read:

J. Pulman, Esq.

"SUBSTANCE of the Instructions issued by Sir Augustus Clifford, Gentleman Usher of the Black Rod, to the Deputy Housekeeper of the House of Lords, in September 1834.

"That the deputy housekeeper should be held responsible for the safety of the House at all times, except when their Lordships were actually sitting, and the doorkeepers of the establishment were on duty.

"That the great door leading from the Lobby of the House of Commons should be kept closed at all times, except when a doorkeeper should be on duty there; and that care should be taken to prevent the Lobbies being made use of as a passage-way for strangers between the Lobby of the House of Commons and the Parliament Offices.

"That during the Session, as soon as the House should have adjourned, and the doorkeepers should have retired, the deputy housekeeper should take care that all the entrances of the House be closed, and the window shutters, as well those of the rooms on the ground floor as of the rooms looking on the leads of the colonnade towards Palace-yard, be properly secured.

"That she should deliver to the watchmen, upon their coming on duty every night, keys of the several entrances of the House and Robing-room, as well as of all the Committee-rooms and official apartments, which they were instructed to visit from time to time during the night.

"That she should receive such keys from the watchmen every morning, upon their going off duty.

"That she should take care that keys of the several Committee-rooms, as well as of the Strangers' Galleries, be placed in the Robing-room for the use of the doorkeepers.

"That no tradespeople, or the servants of tradespeople, with provisions or otherwise, should be permitted to pass to the apartments of any person resident within the walls of the House whilst their Lordships were sitting.

"That she should communicate these instructions to the doorkeepers resident within the walls of the House, in order that they should act accordingly."

[Adjourned.

Wednesday, 29 *October* 1834.

Sarah Taylor, was called in; and having been sworn, was Examined, as follows:

Sarah Taylor.

29 October 1834.

DO you attend the Bush at Dudley as waiter?—Yes.

How long have you been in that capacity?—Nearly 10 months.

Were you there on a Thursday evening, last Thursday week, the 16th?—Yes.

You are sure you were there that evening?—Yes.

You attend every evening probably?—Yes.

Do you remember that evening?—Yes.

Are you the only waiter in the house?—Yes, I am.

Do you attend the commercial travellers' room?—Yes.

What makes you certain you were there that evening?—Mr. Cooper was there.

Had you known him?—Yes.

He had been there before?—Yes, he came in on Thursday evening about half-past nine.

He came by a coach?—Yes, by the Tally-ho.

What did he order?—He ordered tea; I served him with it.

Were there others in the room at the time?—There were other gentlemen in the room at the time.

There were others came in afterwards?—Yes, one gentleman came in; the first that came in was at half-past six o'clock.

When Mr. Cooper was there, was there any other gentlemen there?—There were two more.

Were they gentlemen travellers?—Yes.

Were you long in the room with them?—I was in the room a considerable time, going out and in.

Did

Sarah Taylor.

29 October 1834.

Did you hear them converse together?—Yes, they were talking together.

Was there any conversation respecting the fire when you were in the room?—No.

Did you see anybody come in, and give any information to them?—No.

Did you hear of the fire that night at all?—No, I did not.

Neither from them nor anybody else?—No.

When did you first hear of it?—On Friday morning about 11 o'clock.

At what time did the coach come in on Friday morning?—About nine o'clock, the London mail.

Did you see Mr. Cooper again that morning?—Yes.

At what time did you first see him?—He came down to breakfast in the morning; he slept at our house; he had his breakfast about eight o'clock; went out, returned about 10; paid his bill, and went away.

He had his breakfast in the same room in which he had had his tea the night before?—Yes.

At the same table?—Yes.

Did you see the same gentlemen in the room with him who had been there the evening before?—Two of the same gentlemen were there in the morning.

Was anybody in the room that morning before he went away; were those two gentlemen at that time with him?—Yes.

And he was at breakfast there?—Yes.

You say he came back about 10; were those two gentlemen still in the room?—I cannot say whether they were both in the room when he came back or not.

Were you in the room together with him at any time after he came back?—Yes.

You say you heard it first from a gentleman about 11 o'clock; from whom did you hear it?—A gentleman who drove in in his gig.

Did he say where he came from?—From Stourbridge.

What did he say?—That he had heard that the Houses of Lords and Commons were burnt down, and he hoped it was not true.

Did you hear him say anything about carpenters' shavings?—No.

Did you hear him say from whence he came to Stourbridge?—That he came from Manchester to Stourbridge, and did not hear of it till he came to Stourbridge.

Did he stay long?—About a quarter of an hour.

Did he say anything about a letter or a parcel?—He said if a letter or a parcel came for him, I was to take it in, and keep it till he came back that night.

Did he say any name in which it was to be directed?—Yes, but I forget it.

Was it Downing?—Yes, it was.

He came back that night?—Yes, and slept, and went away the Saturday morning.

The first you ever heard of the fire, or anybody to your knowledge, was on Friday morning, and not on Thursday night?—Yes, just so; on Friday morning, about 11 o'clock, was the first.

And this gentleman said he had come from Manchester, and had heard it at Stourbridge?—Yes.

You say you remember Mr. Cooper coming at night?—Yes; I was standing at the door when he got off the Tally-ho.

You are certain he returned after he went out in the morning of Friday?—Yes.

Are you certain that the day on which you heard it was the day after he had come to your house?—Yes.

And after he had slept at the house?—Yes; Mr. Cooper paid his bill at the Bush at 10 o'clock, and it was about 11 o'clock I heard it; he never came back after 10 o'clock.

Have you ever seen him since?—No.

Do you know the persons who were present when Mr. Downing came from Manchester?—No; there were two travellers in the room, but I do not know their names.

Were they the same travellers who had been there the night before?—No.

Was Mr. Cooper present?—No, he was not.

He was gone?—Yes.

Had you not heard of the fire before he went?—No.

Had you been in the room the whole time, from 10 o'clock in the morning till 11?—I had been out and in; I was not in all the time.

Had the London mail arrived before Mr. Cooper paid his bill?—Yes; it came into Dudley about nine o'clock in the morning.

You did not hear of the news by the London mail?—No; the news might have been brought by that, but I did not hear it so early.

How long was Mr. Cooper gone before this gentleman came and said he had heard this news?—An hour.

During this time you had heard nothing of the fire?—I had heard nothing of it.

[*The Witness was directed to withdraw.*

Mr. *John Riddle,* was called in; and having been sworn, was Examined, as follows:

Mr. *John Riddle.*

ARE you a commercial traveller?—I am.

Were you at Dudley on Thursday evening, the 16th?—I was.

Do you put up at the Bush Inn?—I do.

Were you at that house on Thursday evening?—I was.

Do you know Mr. Cooper?—I do not.

Do you know the gentleman whom you now know to be Mr. Cooper?—Yes, whom I understand to be Mr. Cooper.

Have

Mr. *John Riddle.*

29 October 1834.

Have you seen that gentleman since?—I have not.

At what time in the evening were you there?—At about a quarter before eight in the evening.

How long did you stay there?—I stayed there till nine o'clock; I then went out, and came back in about half an hour.

When you went out, had a gentleman come by the Tally-ho coach?—Not before I went out.

Did he come afterwards?—He came about the same time that I came in.

Did he have tea?—He did.

Were you having tea then?—I was not.

You saw him having tea there, did you?—I did.

Did you hear anything at that time when he had tea, or at any part of the evening, of the fire?—I did not.

Neither out of the Bush Inn nor in the Bush Inn?—Neither.

When you came back at half-past nine, he came in about the same time?—Yes.

How long did you remain there?—Till 11 o'clock.

Had you any conversation with him?—I might have spoken to him.

There was another gentleman there?—There was two or three.

Was anything said by either of them respecting the fire?—I am sure there was not.

Have you any doubt about that?—Not the least.

Did any man come into the room and say he had heard it?—No one.

Did you hear it that night?—I did not.

Were you in the room as long as Mr. Cooper was?—I was.

You slept at the inn?—I did.

He slept there?—Yes.

What time did you get up?—About eight o'clock.

Did you see him that morning?—I do not recollect that I did.

Do you recollect seeing him after nine?—I do not recollect seeing him there that morning.

Did you take your breakfast there?—I did.

After breakfast did you go out?—I did.

Did you hear anything of the fire?—I did.

Where did you hear it?—At the Hotel.

From whom?—Mr. Smith, the landlord.

Did he say from whom he had heard it?—Yes.

From whom?—Robins, the coachman of the mail who had come from Birmingham that morning.

Having heard that from him, did you go back to the Bush?—I did.

Did you go to the commercial room?—I did.

Was there anybody in the room?—There was.

Do you remember seeing Mr. Cooper there?—I do not.

That was between nine and ten?—Yes.

How many were there?—About four, I think.

Commercial travellers?—Yes.

Did you say what you had heard?—I believe I made use of such a word as this, "Here is a pretty go! here is the House of Lords and Commons on fire!"

Did you tell how you had heard it?—I really cannot say that I did, I was in a bit of a bustle.

Can you recollect whether you said you had heard it from a gentleman who had come by the coach?—I cannot say, but it is most likely I did.

Did you say anything about carpenters' shavings?—No, nothing of this sort.

You had not heard that?—No.

Had you any conversation about it while you were in the room?—I do not recollect any.

You think there might have been?—I think that probable.

How long did you remain in the room?—About five or ten minutes.

Are you perfectly certain this was on Friday morning?—I am perfectly positive.

And that you never heard of it till you heard of it at the hotel, from the landlord of that house?—I am quite positive of that.

Mr. *Thomas Cooper,* called in.

Mr. *Thos. Cooper.*

Look at that gentleman?—I think that is Mr. Cooper.

That is one of the gentlemen who was there on Thursday evening?—That was the gentleman who had tea on the Thursday evening; I think so; I will not swear positively, but I have scarcely any doubt.

Do you believe that is the gentleman?—I do.

Do you believe he was also there on the Friday morning?—I do not know.

[To Mr. *Cooper.*] Do you recognise the face of that gentleman?—I do.

Was he there on the Thursday night?—He was.

Was he there on the Friday morning?—I did not see him.

Was he the gentleman who went out and returned and said, he had heard of the fire?—No, he was not.

What sort of a gentleman was it?—I did not notice him, as I told your Lordships before; I should not know him again if I saw him.

Was he a tall or a short man?—I cannot say.

 A black

Mr. *John Riddle* and Mr. *Thos. Cooper*.

29 October 1834.

A black man or a fair man?—I did not notice that; he was not what is called a black man.

That is not what is meant; but was he a man of dark complexion?—I cannot say, indeed.

Whether he was tall or short, or middle-sized, you did not notice?—I did not.

Nor whether he had a black handkerchief or a white one, perhaps?—No.

Nor what he had on?—No.

But you noticed that he had slippers?—I noticed that when he sat down, not before.

Was it not singular you should notice nothing about his person or his dress, except that he had slippers on?—When first I heard it it excited my surprise, that I should have come direct from London and not have heard of it; my attention was directed to that which he stated.

Was he a dark man or a light man?—I did not notice that.

But you noticed that he had slippers?—Yes.

You paid your bill before you went away in the morning, about 10 o'clock?—About half-past 10.

You left Dudley to go to several iron-works at eight o'clock?—About half-past eight.

As soon as you had breakfasted?—Yes.

Are you quite sure you never heard of it that morning?—Quite positive.

You did not hear any one mention it that morning?—Certainly not.

The only time you heard the fire mentioned in that room was on the Thursday evening, not on the Friday morning?—It was not on the Friday morning, I am certain; it was on the Thursday evening.

Was this gentleman present on the Thursday evening in the room when you heard it?—I think he was; I am not positive, but I think he was.

[*The Witnesses were directed to withdraw.*

Mr. *Charles Twamley*, was called in; and having been sworn, was Examined, as follows:

Mr. *C. Twamley*.

YOU are a Solicitor at Dudley?—I am.

Did you make any inquiries at Dudley respecting the time when the report of the fire first prevailed there?—I did.

Where did you make the inquiries?—I made the inquiries first at the Bush, and secondly at the Hotel, the two coach-houses in the town. At the Hotel the first information they had of it was on the Friday morning.

At the Bush when?—The first information at the Bush was on Friday morning.

Did you find any trace of a rumour having reached Dudley on the Thursday evening?—Not the slightest.

Did you make inquiries at various places?—I did.

Did you make diligent inquiry for the purpose of discovering if there had been such a report?—For that purpose.

Did you hear of such a report having reached Birmingham on the Thursday evening?—No, I did not.

Had not you heard, before you made the inquiries, of that report having reached?—Yes, at Birmingham I had seen it in the newspaper that there had been a report at Birmingham.

Did you make that inquiry after having seen that in the newspaper?—Yes, I think it was after I saw that account.

Had you any communication with or from the waiter of the Bush Inn, Sarah Taylor, who has been examined?—Not until I had a communication from Sir John Campbell, requesting me to inquire.

You had heard something that induced you to write to the Attorney-General?—No, I did not.

You wrote a letter to the Attorney-General concerning the account of the report having arrived there?—Yes, in consequence of an inquiry on his part.

And your statement was, that a rumour had prevailed on the Thursday morning?—Yes; but that was afterwards corrected by the waiter.

What waiter?—Sarah Taylor.

It was while you were under the first impression you wrote that letter to Sir John Campbell?—Yes.

Which you now find was a mistake of Thursday for Friday?—Yes, I wrote to that effect the following post.

Sarah Taylor was called in.

Sarah Taylor.

(To Mr. *Twamley*.)—Is that young woman the person you refer to?—Yes.

(To *Sarah Taylor*.)—Did you tell Mr. Twamley of the report having reached the Bush Inn at Dudley on the Thursday?—I told him I heard it on the Thursday; then I recollected it was on the Friday.

You first said it was the Thursday?—Yes, I did.

You told him it was Thursday morning?—Yes; I recollected it afterwards, and I sent to Mr. Twamley, and told him I meant Friday morning.

You never said Thursday evening, but Thursday morning?—Yes, I confounded it with Friday morning; I knew it was in the morning that we heard of it first.

[*The Witnesses were directed to withdraw.*

[Adjourned.

Friday, 7 November 1834.

John Whitbread, having been sworn, was Examined, as follows:

ARE you waiter at the Roebuck at Oxford?—I am.

Do you remember hearing of the fire by which the Houses of Parliament were consumed?—Yes.

At what time did you first hear of it?—I heard of it the next morning, the Friday morning, about seven o'clock.

From whom did you hear it?—Boots told me of it.

It had come down by the coaches in the course of the night?—Yes.

Do you recollect on that Friday morning the Union coach coming in from Birmingham?—Yes.

Did it stop at your house?—Yes, it stopped at our house.

Did any passenger come in from the coach?—Yes, one passenger came in to sup, whom I had to attend upon.

Had you any conversation with him about the fire?—Only that I asked him whether he had heard the news of the fire.

What did he say?—He said he had heard of it.

Did he say where he had heard of it?—I do not recollect that he said where he heard it.

Did he say when he heard of it?—No, he did not to me.

Recollect as nearly as you can what he said to you about it?—To the best of my recollection, when I told him of it, and asked him whether he had heard of it, he said he had heard of it.

Do you remember his saying to you, that he had heard it the night before, three or four hours after it took place?—No.

Or at any time very shortly after it took place?—No, not to me.

Was there any other waiter attending in that room but you?—No.

Are you the only waiter at the Roebuck?—No, there is another, but he does not attend upon that room.

Was there any other passenger by that coach came into that room?—No.

What sort of a looking man was he?—He was rather stout.

Should you know him again?—I do not know that I should; I see so many different gentlemen.

What aged gentleman was he?—He was a middle-aged man.

Was he a fair complexioned man or a dark man?—I think rather a light-complexioned man, but I really cannot be sure. I know he was rather a stout man.

You have no recollection of having heard him say where he heard this?—I never heard him say where he heard it.

Did he say anything about incendiaries?—No.

Did he tell you anything respecting his way of hearing it, or the time at which he heard it, which made it matter of wonder that he should have heard it so soon?—No, I do not know the distance to the place where he heard it, wherever it was.

You know that Birmingham is 110 miles from London?—Yes.

You do not think that it would have travelled that distance in four hours?—No, I should think not, certainly.

Was anything said by this middle-aged gentleman in his conversation with you, about his hearing it at Birmingham, or wherever he heard it, which induced you to express any wonder that it should have reached him in a time so extraordinarily quick?—No, certainly, nothing of the kind.

There was nothing which attracted your attention to his way of hearing it, as somewhat extraordinary?—No.

Did you make any remark to him about his having heard it so soon?—No.

Nothing was said about its being strange that he should have received the intelligence so soon after the event occurred?—Not to me.

Nor in your presence?—No.

You are positive that you made no observation to him upon that subject?—No.

And that nothing was said about its being the work of incendiaries?—No, certainly not.

There was nothing in what he said which particularly struck your mind; but you asked him whether he had heard of the fire, and he said he had?—Yes, that was all that passed.

He did not mention the name of the place where he had heard it?—I do not think he did.

[*The Witness was directed to withdraw.*

[Adjourned.

REPORT

OF THE

LORDS OF THE COUNCIL

RESPECTING THE

DESTRUCTION BY FIRE

OF THE

TWO HOUSES OF PARLIAMENT

WITH THE

MINUTES OF EVIDENCE.

(Presented by His Majesty's Command.)

Ordered, by The House of Commons, *to be Printed,*
25 *February* 1835.

REPORT

FROM THE

SELECT COMMITTEE

ON THE

HOUSE OF COMMONS' BUILDINGS;

WITH THE

MINUTES OF EVIDENCE

TAKEN BEFORE THEM.

Ordered, by The House of Commons, *to be Printed,*
13 *May* 1833.

Jovis, 7° die Martii 1833.

Ordered, That a Select Committee be appointed, to whom shall be referred the Report which, upon the 6th day of October 1831, was made from the Select Committee appointed "to consider the possibility of making the House of Commons more commodious and less unwholesome, and who were empowered to report their Observations and Opinion, together with the Minutes of Evidence taken before them, to The House, and who were instructed to inquire in what manner adequate Accommodation can be best afforded to its Members;" and to report their Observations and Opinion thereupon to The House: and a Committee was appointed of

Mr. Hume.
Lord Viscount Althorp.
Lord Ashley.
The Earl of Darlington.
Mr. Baring.
Sir Charles Burrell.
Mr. Bonham Carter.
Lord Viscount Duncannon.
Mr. Denison.
Mr. Estcourt.
Mr. Shaw Lefevre.
Mr. Littleton.
Mr. Mildmay.
Sir Robert Peel.
Mr. Wilbraham.
Sir Thomas Fremantle.
Mr. Fox.
Mr. Buckingham.
Mr. Hall.
Mr. Humphery.
Colonel Davies.
Lord Viscount Lowther.
Mr. Warburton.
Sir John Wrottesley.
Mr. Hanbury Tracy.
Sir William Molesworth.
Mr. Maurice O'Connell.
Mr. Clay.
Dr. Baldwin.
Mr. Wallace (of *Greenock.*)
Mr. Divett.

And they are to meet to-morrow, in the Speaker's Chamber; and have power to send for Persons, Papers and Records.

Ordered, That Five be the Quorum of the Committee.

Martis, 12° *die Martii* 1833.

Ordered, That Mr. Hyett and Sir Harry Verney be added to the said Committee.

Jovis, 28° *die Martii* 1833.

Ordered, That Sir John Hay and Mr. Guest be added to the said Committee.

Lunæ 13° *die Maii* 1833.

Ordered, That the Committee have power to report the Minutes of Evidence taken before them.

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REPORT.

THE SELECT COMMITTEE to whom was referred the Report which, upon the 6th day of October 1831, was made from the Select Committee appointed "to consider the possibility of making the House of Commons more commodious and less unwholesome, and who were empowered to report their Observations and Opinion, together with the Minutes of Evidence taken before them, to The House, and who were instructed to inquire in what manner adequate Accommodation can be best afforded to its Members;" and to report their Observations and Opinion thereupon, and who were empowered to report the MINUTES OF EVIDENCE taken before them, to The House;—HAVE called before them and examined several eminent Architects upon the subject to them referred, and have agreed to the following RESOLUTIONS.

Resolved,

THAT it is the Opinion of this Committee that the present House of Commons does not afford adequate Accommodation for its Members, and that no Alterations or Improvements could be made in the present House which would afford adequate Accommodation, due regard being had to the Health and general Convenience of the Members, to the dispatch of Public Business, and to the Expense to be incurred: and the Committee, therefore, recommend the erection of a New House of Commons; and they refer the House to the Evidence which has been taken as to the Plan and Site, and the Expense in such case to be incurred.

Resolved,

THAT it is the Opinion of this Committee, that the imperfect Ventilation of the present House is most injurious to the Health of the Members, and it is expedient that the immediate attention of the Board of Works be directed effectually to remedy so serious an inconvenience.

13 *May* 1833.

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MINUTES OF EVIDENCE.

Jovis, 14° *die Martii*, 1833.

JOSEPH HUME, ESQ., IN THE CHAIR.

Sir *John Soane*, called in; and Examined.

Sir *John Soane.*

14 March 1833.

1. HOW long have you been an architect employed in the Government service?—From the year 1794.

2. It appears that in 1794 you were directed to turn your attention to alterations in the House of Lords; have you since then done so?—I have.

3. Have considerable alterations in the House of Lords been made under your superintendence?—No alteration has been made in the House of Lords under my direction; but in the Committee-rooms, and other parts, various alterations have been made, and some new Committee-rooms, and rooms for other purposes, erected.

4. Have you directed your attention to the House of Commons, and any alterations in it?—I conceived myself called on, when I had those orders of the House of Lords, to consider how it was connected with the House of Commons, and with the other buildings belonging to the two Houses of Parliament, and that compelled me to give a very large consideration to the capacity and situation of the House of Commons, as being connected with my general plan.

5. Is that a ground plan drawn by you of the adjacent buildings and land, (*A Plan*, No. 2, *being shown to the Witness*)?—Yes. *See* No. 2.

6. Are the Committee to understand by this plan, that between the east end of the present House of Commons and the wall towards the river and the river side, there are 156 feet of spare space?—Something like that.

7. Is this plan made from the actual survey?—From the most accurate that I could have made; there may have been alterations made since that may vitiate it in some measure, but I am not aware of any such.

8. That would not alter the ground plan?—No.

9. Was Mr. Ley's house built at that time?—Yes.

10. But the new Library has been added since that time?—Yes.

11. There appears upon this plan a coloured place for the new Library; has that been put in by you since then?—Yes.

12. And is that the relative situation that it bears to the Painted Chamber and Mr. Ley's house?—Yes, precisely so.

13. Have you considered whether the present House of Commons could be enlarged, so as to contain a greater number of Members, and afford greater space for them?—I have considered it from time to time, I may say from the year 1794, for at least 30 years; and the result of the best consideration I could give the subject was, that it was totally impossible, by any means whatever, to enlarge the House of Commons sufficiently to make it commodious and fit for the accommodation of the Members, even when the number was very small compared to what it is now; for I think I was then told, that if I provided for 450 or 500, that would be ample.

14. Where do you consider the difficulty to arise; is it in want of breadth, or in want of length?—In want of breadth; the length might be increased in various ways.

15. Could not the side walls of the present House be removed, and walls, giving a breadth of 10 or 15 feet on each side, be erected?—You might have recesses between the piers, but you could not remove the whole of the side walls; that would be impossible without removing the roof likewise.

16. Supposing the roof removed entirely; in that case could you not remove the piers?—Certainly.

17. You are not aware that you could do it without building an entirely new House?—Taking down not only the piers, but the ceiling and roof also, it would be equivalent to building an entire new House.

18. Supposing

Sir *John Soane.*

14 March 1833.

18. Supposing the present House were pulled down, is there space sufficient to build a House of greater width?—I think not, without encroaching on Mr. Ley's house, then, I think, you might have ground sufficient; but at the same time I consider it to be a very bad situation for a new House of Commons.

19. On what ground is it bad?—Because it would be so extremely confined.

20. Do you consider that the Library that has been lately built between the Painted Chamber and the present House has straitened the limits very much?—Certainly, materially.

21. Do you think that that would impede the ventilation?—Yes, considerably.

22. Are the Committee to understand, that the space of 12 feet on each side beyond the present width of the House could not be obtained without pulling the whole building down?—Certainly not.

23. And with that alteration it then would be equivalent to erecting a new building?—Certainly.

24. Is it your opinion that, if that was done, the situation then is not the best that you could select?—My opinion is that it is not the best; that it would be as expensive, or perhaps more expensive, than any other plan; and at the same time it would be destroying a great national monument, that is the pride of the country.

25. Then any alteration that you have contemplated has not been to pull down the present House of Commons, but to add to it?—What I have always proposed has been, to erect a new House of Commons, leaving the old one standing as it is.

26. But even pulling down the present House of Commons and building another in its place, would there be greater disadvantages attending that than building a new House of Commons on the same site?—I am of opinion, that to rebuild the House of Commons on the site suggested would be a very costly plan; and, when done, there would be want of air and ventilation.

27. What would be the total breadth, supposing 10 feet on each side beyond the limits of the present House?—About 63 feet.

28. Would you consider that sufficient space to erect a building suitable for the accommodation of 600 members?—I should not.

29. That is supposing the width is 63 feet, with an unlimited length?—If you do not object to length, it does not signify whether it is 50 feet or 60 feet in breadth.

30. Supposing it is 60 feet broad, what must the length be?—At least 90 feet.

31. Are you not aware that increasing the size 16 feet on each side would more than double the present seats of the House of Commons?—I am not prepared to answer that positively, but I should think it would not double it, unless the spaces between the seats are confined to their present narrow dimensions.

32. Are you aware that the present seats, from the floor to the wall, do not on the sides occupy more than a space of 9½ feet?—I am not aware of the exact dimensions of that.

33. Considering that if the new House were built upon the present site it would be necessary to clear away the old House, could you between the adjournment of the House, which takes place generally about the end of July, and Christmas, when the House generally meets again, in that time, upon that space, erect a new House in a substantial manner?—I should say not.

34. It would be necessary, therefore, during that adjournment of the House, to provide another room, adequately fitted up for the reception of the House of Commons, while the new House was being built upon the old site?—Most certainly.

35. What time do you think it would require, supposing a new House to be built, from the period of commencing the building until the time that the House might sit in it?—Not less than two years.

36. Is that the minimum of time?—No; I should take two years as sufficient time, but certainly it is the least time that a man attached to solidity of building would think of; I know perfectly well that it might be built in a much shorter time; but what is the effect of it? Ruin almost immediately follows. It is the great misfortune of the buildings of the present day that they are run up so rapidly. We hear of dry-rot, and defects of every kind, that never occurred in the old buildings; because our forefathers, having duly considered and digested their plan, collected materials and then carried the design into effect; by this mode of procedure the materials became well seasoned, and the walls were substantial and durable.

37. Do you think it would take more time to build a new House of Commons on the site of the present than to build a House of Commons upon a new site?—I should think it would, because in that case it would be necessary first to take down and clear away the old buildings.

38. You have stated that your attention was directed to this subject, and you had prepared plans for a new House of Commons; are you prepared now to state where you had proposed to erect that new House, or what kind of a house you would erect?—I have made several different plans, but in that I last made it was proposed to be erected on a site eastward of the present House, towards the river; and that is the result of most serious consideration.

39. At what time was that plan prepared?—1794.

40. Is this the individual plan you made out (*A Plan being shown to the Witness*)?—This is the copy of the very plan, to which has been added the alterations since made connected with the new entrance for His Majesty into the House of Lords.

41. After the experience you have had, and the alterations you have made in the buildings about the House of Lords, do you consider that that spot, as originally fixed by you, would be the best, should it be determined to erect a new House?—I do.

42. Have you ever considered the propriety of erecting it where Mr. Ley's house now is, midway between the House of Commons and the Painted Chamber, towards the river side?—Yes, I have.

43. Do you consider that that would have any advantages beyond the one which you state direct east from the House of Commons?—No.

44. Could you not then place it upon a level with the House of Lords, and go immediately from the House of Commons into the House of Lords through the Long Gallery?—If the House was to be erected on the site of Mr. Ley's house, taking that as the centre, you could go through the Long Gallery into the House of Lords; but I did not propose to build the House of Commons between the Library and the present House of Commons, but to bring it out to the eastward; and to the other plan there are really great objections; it would take a long time to state the objections, for they are so numerous.

45. What would be the disadvantages of building it upon the site of Mr. Ley's house; will you state a few of those disadvantages which you think would arise from building it there?—I will give the Committee one which, in my mind, is very important, that you have no direct connexion with the present House of Commons. I would rest upon that, not to mention the want of proper ventilation in that situation.

46. What should prevent your building it upon the site of Mr. Ley's house, so as to allow a communication with the present House of Commons?—Insufficiency of space.

47. Supposing 60 feet or 62 feet to be sufficient for the width of the House of Commons, would you not have a very good Gallery or Lobby between the Painted Chamber and the present House of Commons, allowing 62 feet from the Painted Chamber, and supposing the present Library to be removed?—Yes, if the Library and the Committee-rooms over it are removed.

48. The question contemplates that the present House of Commons should be turned into a Library; what do you think of that plan?—That was one of my plans. I have made three appropriations of the House of Commons; the first was to restore it to a Chapel for the use of Members of both Houses of Parliament; the second idea was to make it a Library; and the third was to make it an Anteroom to a new House of Commons. Those are the three different ideas I had upon the subject.

49. Is not the window of the Speaker's dining-room immediately below the present window of the House of Commons?—Certainly.

50. Do you contemplate the blocking up of that window?—It is not absolutely necessary to do it; that window might be preserved.

51. Supposing the Library to remain, the distance between it and the walls of Mr. Dorington's office would be 53 feet?—About 47 feet.

52. Supposing that there was no objection to remove the present Library, should you not choose that situation and that way of doing it, connecting as it does the new

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House of Commons with the House of Lords and with the Library, by a lobby between, in preference to any other?—No, I should not.

53. What is your reason?—Because the ventilation is not so good there; that is one reason, which I think is very important.

54. Is there any other?—That alone is, in my opinion, a strong reason, to which may be added the inadequacy of the space for the purpose.

55. Would not the expense of pulling down Mr. Ley's house, and pulling down the Library and erecting a new Library be very considerable?—Yes, it would, for those buildings cost a very large sum; and you would likewise destroy Mr. Ley's house.

56. Supposing the expense the same, and that you had the power of pulling down both those houses, would you in that case prefer that situation to the one directly east of the House of Commons?—Having given a great deal of attention to the different situations, I have no hesitation in saying that I should give preference to the situation directly east of the House of Commons.

57. If the present Library were pulled down and a new House of Commons erected between the old House of Commons and the Painted Chamber, and the present House of Commons were converted into a Library, would it not be necessary to build a new Lobby for the House?—I should think so.

58. Are you aware that in case of a division of the House a room is required which will hold 650 Members?—In my humble judgment I should have considered it necessary to have provided a room sufficiently capacious to receive the whole of the Members of the House of Commons.

59. Would not the present House of Commons, if made an Ante-room to the new House of Commons, be a very convenient room for that purpose?—Most undoubtedly.

60. In the plan which you have mentioned, did you contemplate the present House of Commons to be that Lobby?—I did.

61. What other advantages, in addition to making the present House of Commons the Lobby, did you contemplate in erecting a new House due east of the present House?—It gives easy approaches to all the different parts of the building.

62. Does not this additional advantage also attend not filling up the space between the present Library and the present House of Commons, that you allow for any future enlargement of the Library, as the books shall increase?—There does.

63. You have stated that your plan for building a House of Commons is better, on account of its easier approach; would it not also be better on account of its being less expensive than a house built on the site of Mr. Ley's house?—Yes, and having a better ventilation.

64. It would be better ventilated?—It would be completely ventilated in every part.

65. Would it not also be less expensive, inasmuch as, by the other plan, we should be obliged to build another Library?—Yes.

66. Are you aware that there are great complaints of the badness of the air which now enters the House of Commons, and of the bad smells?—Certainly, it is badly ventilated.

67. Must it not be so while the situation is so confined, and surrounded by other buildings?—I think so.

68. Is it then your intention, in the plan that you have for building a new House, that the site preferable for the object should be immediately to the east end of the present House of Commons?—Very near it; as near as possible.

69. Do you make the access of the new House the same as the access of the old House of Commons?—Precisely.

70. Do you contemplate the opening from the present House to the eastward to the new House to be by folding-doors, or in what way?—By a large arch to support the wall above, and enclosed below with folding-doors.

71. Are the dimensions of 75 by 85 and 40 feet high the dimensions of the building that you think would answer?—I think so, for the interior area of the House.

72. What space do you give to each Member, supposing the whole Members present?—Two feet for the seat, and three feet four from the front of one seat to the front of another.

73. Would the dimensions which you have put down, give accommodation, at that rate, to the whole Members of the House?—To 600 Members.

74. Do you contemplate any gallery for the Members, or is it to be entirely free from gallery?—Entirely free.

75. Have you in that plan provided any place for strangers?—Yes.

76. In what situation would you propose to place the Strangers' Gallery?—Over the Speaker.

77. Advancing into the House, or retiring from it?—Retiring from it.

78. Then the walls round would be plain to the Gallery?—Yes.

79. Would not the new House of Commons, if placed in that position, block up the light to the old House of Commons?—There would be plenty of light in the old House of Commons.

80. Would it be easy for a speaker, speaking from one of the benches on the floor near the Speaker's chair, of course addressing himself towards the Speaker's chair, to make himself heard by the Members sitting on the back benches of the House?—I think it would.

81. Have you provided a corridor or passage all round the House?—I have.

82. How do you propose that the Members should enter; through one door to the House, or by small openings from the corridor?—By both.

83. Have you provided any other way to the Strangers' Gallery than the way by which the Members go?—Certainly; they need have no connexion whatever with the Members.

84. How do you get at the galleries for the strangers?—By the same way as you go now to the Library, and to Cotton-garden. There is a staircase at the end purposely for them; they do not interfere with the House; and it gives them the most ready communication that I can devise.

85. By the road now open to Cotton-garden and Mr. Ley's house?—Exactly; it would go under part of the new Library.

86. In this plan, do you contemplate entirely taking away Mr. Ley's house?—Entirely; and making a communication from one part of the corridor into the Library.

87. By a shorter line than the present line of communication through the Long Gallery?—Yes; you would come immediately to it.

88. For what number of strangers do you propose to find accommodation in the Strangers' Gallery?—For any number that you like.

89. Have you made any calculation as to the number?—No; but about 400; if more accommodation is required in the Strangers' Gallery, its size might easily be increased.

90. Allowing 16 feet the depth of the gallery, and the whole width of the House 75 feet, would that contain 300 or 400 persons?—Yes, nearly 400.

91. Are you aware how many the present gallery contains?—No, not exactly.

92. Have you considered where the reporters of the proceedings would best be situated?—I have.

93. In what situation is that?—I propose that the reporters should take the first row of benches in the gallery, entirely separated from the others; when you go up the staircase that I have just spoken of, there is a little ante-room for their use.

94. Would not this advantage attend the placing the reporters in the first bench of the gallery above the Speaker, that a Member speaking would at the same time direct his voice to the Chair and towards those that are to report?—Certainly; it is, in my opinion, the best possible situation for them.

95. You consider the best situation for a person reporting a speech to be before the speaker?—Yes, I do.

96. Have you contemplated any space for strangers under the gallery?—I have not.

97. Have you contempleted in this plan that you are injuring greatly the Speaker's house, as well as taking away Mr. Ley's house?—In making my designs, I have endeavoured to show, as far as my humble talents will allow, not only what I should recommend to be done, but what I should not recommend. So far from it being my intention to propose a plan for taking away Mr. Ley's house, I only have shown it here that the Committee might see what the advantages were, and what the disadvantages were. When the Committee come to the plan which I shall recommend, they will find that Mr. Ley's house is undisturbed.

98. If Mr. Ley's house was removed, would it not promote the ventilation of

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Mr. Bull's Offices, and the Long Gallery, and all that part of those buildings?—Most certainly.

99. Besides the plan you have now submitted, have you thought of any other which you would submit to the Committee?—I have.

100. Will you state what that plan is, and wherein it differs from the plan you have now stated?—It differs from the plan I have now stated, inasmuch as it does not disturb Mr. Ley's house.

101. Is that the only advantage you have in your plan over the other?—That is the principle advantage. I would take the liberty to state that these are very crude ideas, that I should modify very materially in making out the necessary details in order to carry the plan into effect.

102. By the plan you now submit, is it proposed to have a building of the same dimensions?—Yes, and arranged generally in the same manner, and to have the access the same as in the plan just shown to the Committee.

103. Wherein does your plan differ from the other?—It differs in this respect, that the new House of Commons comes up nearly close to the present House of Commons, and the other plan throws it to a greater distance.

104. What distance?—About 12 feet.

105. Then the difference is that Mr. Ley's house is preserved, and the buildings protrude in front of the Speaker's house the same, save and except there is 12 feet difference to the eastward?—Yes, just so.

106. But in this second plan you close the direct communication from the new House to the Library?—Yes; you have no other way then but to go through Mr. Ley's house.

107. Supposing the new House of Commons to be built on the second plan, would it not be desirable that Mr. Ley's house should be, on account of the ventilation and other reasons, removed?—Not solely on account of ventilation; if economy was not to be considered, I should say, take away Mr. Ley's house.

108. What do you think would be the difference of expense?—That requires an estimate.

109. Would it be very heavy?—Certainly; because, I presume, you would have to provide another house for Mr. Ley.

110. What would it cost to build a new house as good as Mr. Ley's present house?—About 4,000 *l.* or 5,000 *l.*

111. By the plan you have shown the Committee, it was intended to block up the window of the Speaker's dining-room; will the second plan enable you to save that window?—No.

112. Would it not be practicable to provide a dining-room for the Speaker underneath the present House, without increasing the expense of the building at all?—I have another application for the space underneath the proposed new House of Commons.

113. What access do you propose, leaving Mr. Ley's house standing, according to the second plan, to the Strangers' Gallery?—Just the same as I have before stated. My plan does not take down Mr. Ley's house, but it takes away part of the buildings to increase the ventilation; that is, it takes away Mr. Dorington's Office, the Clerk of Committee's Office, and the Journal Office, which are old buildings, and therefore, in removing them for ventilation, I propose now to substitute a better accommodation for them. The first object I have in taking away those very old, and certainly very inconvenient, buildings, being upon a variety of different levels, and forming all sorts of angles, is, that I shall by that means get a very good light for the Speaker's state dining-room from the open space on the south side.

114. Does that render the eastern light unnecessary?—Yes, it does.

115. What would be the extent of open space, supposing those old buildings all removed, before the new window which you propose to give to the Speaker's dining-room?—I propose to open two windows in that room on the south side. The space would be 14 feet in front of the easternmost window, and upwards of 60 feet in front of the westernmost window.

116. Does that assume taking away Mr. Ley's house?—No, it leaves Mr. Ley's house as it now is.

117. Will not the building of the House due east from the House of Commons interfere much with the ventilation and prospect from the Library, and the ventilation and prospect from the Speaker's apartments?—It will not affect the ventilation of either, I presume; but the prospect certainly will not be improved, but not so affected as should, in my opinion, operate against the adoption of the plan.

118. Is

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118. Is the foundation equally good the nearer you advance to the river?—The whole is as bad as it can be, as a foundation.

119. May you not know what is necessary, as regards the foundation upon the flat that they both stand upon, from the new Hospital that has been built at Westminster Abbey, where an artificial foundation, made of lime and other things, has been found necessary?—Yes; at the new State Paper Office, at the end of Duke-street, it was necessary to sink below the level of the street at least 20 feet, to the bed of gravel, to remove the loose earth and mud, and form foundations for the walls of solid materials.

120. Do you not suppose that the foundation both upon the old and upon the new site would be precisely the same?—I have no reason to doubt it; whenever I have had to prepare foundations for buildings about the House of Lords or the House of Commons I have found it very much the same.

121. Is it not the case that you have a bed of river mud lying upon a bed of gravel beneath, and you must go through that bed of river mud and come to the bed of gravel underneath in order to get a good foundation?—Yes.

122. And that solid foundation is a bed of gravel lying underneath a bed of river mud?—Yes.

123. And it is upon that bed of gravel lying upon a bed of river mud that you would put a grouted foundation?—Yes.

124. Is that the same in both cases, whether you build upon the old or the new foundation?—Yes.

125. Will you state how you propose to appropriate the space under the new building?—For those very offices that have just now been spoken of, and which I propose to remove; and it would leave a very large space to be applied in any other way that may be thought proper. There is a staircase at each end, by which a communication would be made with those offices.

126. How many feet is the level of the present House of Commons, (which would be the level of the new House) above the level of Cotton-garden?—I think it is about 14 feet.

127. Are the Committee to understand that you would have the whole area of the new House 14 feet high, for any rooms or accommodation you might wish?—Certainly; I propose the new House of Commons to be upon the same level as the present House of Commons, which leaves me 14 or 15 feet beneath to dispose of. That disposable space I conceive would be of very great value, and I should apply it for the different offices I propose to remove, leaving a very large space to be applied to any other purposes that might be required.

128. Could that space below the House of Commons be made perfectly dry for the custody of petitions or other documents?—Perfectly dry, for by the mode proposed in my plan there are flues under every part of the building.

129. Would the proposed floor below the House of Commons be completely beyond the reach of high-water?—Yes.

130. And completely above the level of the present ground?—Yes, at least three feet.

131. Do you think that the proposed site of the new House of Commons would be a salubrious site?—The best you can possibly have in Westminster. I think that, from the circulation of air round the proposed new building being so complete on every side, it is impossible to imagine a more healthy situation in Westminster.

132. Do you propose to make the space between the new House of Commons and the space below fire-proof?—Certainly.

133. By which it would become particularly useful for petitions or records of the House?—For anything you please. In speaking of the expense of building a new House of Commons, you ought to give credit for the substructions, I mean the rooms you have under.

134. How many entrances do you contemplate for Members into the new House?—One under the arch already described into the corridor, and several from the corridor into the body of the House.

135. Is there any observation, reserving the expense for future consideration, respecting the situation, the ventilation or improvement of the space, which you would wish to make?—I have only to observe, that after the best consideration I have been able to give the subject from the year 1794 to the present time, I think that the plan I have now submitted to the inspection of the Committee the best that can be suggested.

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136. And you take into consideration the great additional accommodations you will obtain under the new House for purposes connected with the business of the new House?—It is an immense space, well lighted and ventilated, and applicable to many useful purposes.

137. In the arrangement of the new building, supposing it to be what you propose, could the present level of the House of Commons, which is four or five feet above the level of the House of Lords, be placed upon the same level without any great expense or inconvenience?—There certainly would be considerable expense in it, and a great deal of time occupied.

138. Have you thought of any means by which the access from the House of Commons to the House of Lords by the old plan could be made more convenient?—That would be, in other words, to make it on the same level; that certainly could be done, but it would increase the expense considerably.

139. What way would it increase the expense considerably?—Because you would have a great deal of building to pull down, and a great deal to reinstate.

140. Would it not be possible, leaving the level of the new and of the old House of Commons just as it is, to make the Members' approach to the House of Lords more convenient than it is at present?—Undoubtedly it might be made much more convenient by a small alteration of the ancient screen, and making the floor of the outer Lobby and the Lobby to the House of Lords on a level with the House of Lords itself; by this alteration the necessity of first descending a number of steps, and then ascending again into the House of Lords, would be obviated, and the very important object of gaining a direct communication between the two Houses of Parliament would, in my opinion, be completely attained.

141. Is the present floor of the House of Commons on the original floor of St. Stephen's Chapel?—I have always understood so.

142. In any alteration of the old House, or in the erection of a new one, is it not probable that you will be more successful in having a good sound by having a circular end than by having square sides?—Yes; you will find that in the Olympic Theatre at Vicenza there is a circular end; so had all the ancient theatres, both Greek and Roman.

143. Do you consider that shape to be peculiarly favourable to hearing?—If it had not been so, I conclude the ancients would not have adopted it so generally.

144. Have you made any estimate or calculation of the expense such a building, as large as now stated, could be erected?—I have not; previous to my doing that, all the working drawings must be made, and detailed specifications of the works must be prepared, which would require considerable time and attention, but in a fortnight I will be prepared to give the Committee a rough estimate.

Veneris, 15° die Martii, 1833.

JOSEPH HUME, ESQ., IN THE CHAIR.

Sir *Robert Smirke,* called in; and Examined.

Sir *Robert Smirke.*
15 March 1833.

145. HAVE you directed your attention generally, since the period you were examined by the Committee in 1831, to the possibility of enlarging the present House of Commons so as to contain 600 Members?—No, not at all.

146. The opinion you gave on that occasion you still adhere to?—It remains the same.

147. Have you considered where or how you would give that accommodation, otherwise than by building a new House?—I do not think it is possible.

148. Are you in possession of a ground plan of the House of Commons and adjacent buildings?—I am not.

149. There is one before you. Are you able to state to the Committee in what situation you would recommend a new House to be built?—No; I should require a little more time for consideration before I gave an opinion on that point.

150. Have you formed any opinion as to the kind of House, whether oblong, square,

square, or in what shape the House would be most desirable?—That is also a point on which I should like to have time for consideration. Sir *Robert Smirke.* 15 March 1833.

151. Supposing two feet for each sitting, and three feet four inches from front to back of each seat, what would the area in that case be?—I should think not less than 6,000 superficial square feet; between 5,000 and 6,000. I recollect the House of Representatives at Washington is a semi-circle of about 100 feet; that holds only 213 Members; then they allow large writing-desks, and accommodation, such as would be agreeable.

Veneris, 29° die Martii, 1833.

JOSEPH HUME, ESQ., IN THE CHAIR.

Sir *Robert Smirke,* called in; and further Examined.

152. AS you have had time to consider what would be the proper situation for a new House, the Committee are anxious now to have your deliberate opinion upon that subject?—I have not had sufficient time to give full consideration to so important a point; but I shall endeavour to offer to the Committee the best opinion I can. It appeared to me to be very necessary, in the first instance, to examine particularly the state and condition of all the different Offices connected with the House, because upon the state of them would depend the expediency of making a new building in connexion with any part of them. I have taken the liberty of writing down my answers to the questions upon this and other points that were put to me, thinking it might save the time of the Committee. With regard to the first question, which was, "What situation for a new House would be recommended?" I have to say, that, considering the defective state and inconvenient arrangement of the Offices and Committee-rooms attached to the present House, I am of opinion that such a situation ought to be selected as will afford the best opportunity of providing progressively for a general and improved arrangement of the whole establishment of the House. With this view I should prefer building a new House, in connexion with the present one, at its eastern end. The second question was, "What sized and what shaped House would be best to afford accommodation for the Members, allowing two feet sitting, and three feet four inches from front to back of the seats; also accommodation for 50 Peers and for 150 strangers, separated from the Members of the House, to admit of the House dividing, without turning out strangers?" The third question is so much connected with the second, that I found it necessary to consider them together. The third question was, "Whether there should be a Gallery projecting or retiring, for the accommodation of any portion of the Members?" My answer to those questions is this: the size of the House will depend upon the decision of the Committee in regard to a Gallery for Members; if there is no Gallery, and the ample accommodation prescribed is to be given to 600 Members, I am of opinion that the House will be found inconveniently large for its purposes, whatever may be the form given to it. If the House were made of a semicircular form, like that of the Chamber of Deputies at Paris, by which the whole number would perhaps be brought together in the most compact form, the area of the room would not then be less than about 100 feet by 60 within the walls, exclusively of the Passages of communication round the seats, and of the space which the seats for Peers and for strangers must occupy: believing that such a room would be inconvenient, I am of opinion that a Gallery should be made, providing seats for about 150 Members; and if the Gallery were made to project not more than about four feet before the space of the wall under it, it would not obstruct the hearing nor the ventilation of the House. With such an arrangement the dimensions of the room might be very much reduced; and instead of giving it a semicircular form, I should prefer having its sides made straight and parallel, and the end opposite the Speaker's chair of a curved or semi-hexagonal form. Seats for the public might be well provided in recessed galleries, behind that allotted to the Members. The fourth question was, "If the present House of Commons is not used as a Lobby, a new Lobby to hold 600 Members will be wanted, and must be considered in making part of the Estimate?" I should certainly recommend that the present House be fitted up and used as the Lobby. Sir *Robert Smirke.* 29 March 1833.

Sir *Robert Smirke.*

29 March 1833.

The fifth, "What time would be required to build the House, and for occupation?" It would be desirable to allow two summers for the completion of such a work. The sixth, "What would be the expense of such a building, allowance being made for fitting up the space under the area of the new House, for offices for the Ingrossing Clerks, the Committee Clerks, Journal Office and Dorington's Office, which would be removed from the south side of the present House, to improve ventilation, &c.?" I am of opinion that such a House might be built for between 20,000 *l.* and 25,000 *l.*, taking into consideration the House only, with the proposed rooms under it.

153. You mean, fitting up the whole space under it?—Yes. I cannot at present offer an opinion upon the farther expense that would be incurred by removing the present official buildings attached to the House, and by adopting a plan for the general and improved arrangement of the whole; it would depend upon so many considerations, that it would be impossible to give an opinion upon the expense until the plan were maturely considered, and the state of the buildings very accurately ascertained. The seventh question was, "To consider how the difficulty of access, by inequality of level of the two Houses of Parliament, can be lessened, and the communication between the new House of Commons and the Library be also facilitated?" I think, that in the arrangement of a general plan it would be easy to make the communication between the two Houses of Parliament much more convenient and direct than it is now, but the difference in the level of the two floors will make it necessary to have some steps. A more convenient communication with the Library might be made by the removal of Mr. Ley's house.

154. Do you think it necessary to remove the present buildings attached to the House?—I think it would not be wise to adopt any plan for a new House of Commons, with the proposed Offices under it, which did not comprise the general improvement and arrangement of the whole; for, as I have before stated, the greater number of the buildings are in so defective a state, and many of them built in so temporary a manner, that expense must be frequently incurred in repairing them, and a plan ought to be adopted which might enable you gradually to remove these, and let the new buildings, as they are executed, form part of some general arrangement; and I think it might be done.

155. In speaking of official buildings, to what extent do you include, beyond Mr. Dorington's Office, the Journal Office, the Committee Clerks' Office, and the Ingrossing Office?—I include all those that are connected with the present House, on both sides of it.

156. Meaning thereby the Committee-rooms?—Yes.

157. And Mr. Bellamy's rooms?—Yes.

158. Do you mean the Committee-rooms that extend to the westward over the western entrance?—No; but if I were making such a general plan as I have alluded to, I should propose the appropriation ultimately of all those rooms to other uses.

159. Keeping in view the removing by degrees the Committee-rooms from the whole of the western side, where they are at present, of Westminster-hall?—Yes.

160. And bringing them in connexion with the new House?—Yes, certainly.

161. Would you consider the removal of the present house occupied by Mr. Ley, in addition to Mr. Dorington's Office, as necessary for that object; or would you think it necessary to take any of the space northward of the present House, now occupied by the Chaplain's room, the Vote Office and other buildings?—Yes.

162. Would you contemplate meddling with any portion of that which forms especially the Speaker's house, and not long ago built?—I think it is very possible that some arrangement might be proposed by which it would be considered advantageous eventually to make an alteration in parts of that house.

163. You think it not necessary to interfere with them?—No.

164. Are the Committee to understand that it is your opinion, that whatever plan may be adopted for building the House of Commons, there should also at the same time be kept in view the possibility of having all the requisite offices in immediate connexion with the House, instead of being scattered as they now are in different parts?—I think it extremely desirable.

165. Then in looking at the space between the present House and the river, amounting to about 160 feet, due east, and taking the space there is south and north unoccupied, do you consider that there would be ample room for buildings to afford better accommodation than the whole of the irregular apartments that are now allotted for that purpose?—Certainly better accommodation than there is now; but

but not complete accommodation, without interfering with the Speaker's house. I think it very possible that some arrangements might be proposed which would render the removal of the Speaker's house, or part of it, very desirable, in order to make the plan complete whenever the whole could be carried into execution.

166. Supposing it were necessary to take 30 or 40 feet north of the present House, of that part of the building occupied by the Speaker, are you aware that north of the Speaker's present house (the old building lately occupied by the Exchequer) an equal space might be obtained there for adding to the accommodation of the Speaker what you would take from him?—Yes, there is ground amply sufficient for all that could be required.

167. In the space under the House, would not a very considerable portion of accommodation be afforded to the five or six smaller offices which now lie along the south side of the present House?—I think there would.

168. Would not the access to them, as being on a level, be much more convenient than their present irregular situation?—I should think much more.

169. You propose a communication between the Library and the new House; in what way would you think that best done?—I am not prepared to say; but if Mr. Ley's house were taken down, a corridor, affording direct and convenient communication, would be very easily made.

170. You mean in the space partly occupied in Mr. Ley's house?—Yes.

171. Have you ever examined Mr. Ley's house?—Not particularly.

172. At what period was that built?—I do not know.

173. Is it a substantial building?—I think not. I observe that the walls are held together by a number of iron ties.

174. Is not the present state of repair of Mr. Ley's house very indifferent, and likely to require at no distant period considerable expense to repair it?—I have not examined it sufficiently to answer that question; but it appears to me to be not much better than most of those connected with the present House of Commons; they will all require soon a very considerable expenditure for repairs, for some of them are only built of wood.

175. In what manner do you contemplate the entry to a new House and the new Committee-rooms (supposing them built), otherwise than through the Lobby of the House?—I think that a passage of communication might be made on each side of the present House.

176. Now, in making the passage on each side of the present House, would you consider the access between the new House and the House of Lords likely to be better facilitated by a passage south of the present House, so as to lead from the House directly into the Lobby of the House of Lords, without going through the present House and the present old Lobby?—I should prefer an arrangement which would give the public access to the new House on both sides of the present one, so that it should not be necessary for any stranger to pass through the present House when it became the Lobby.

177. You would leave that entirely for the use of the Members?—Yes.

178. Do you consider that both Members and strangers might find access to the new House on the south and north of the present one?—Perfectly well.

179. In the building you contemplate, would it be necessary to shut up the windows of the Speaker's dining-room under the present House; and if so, would you be able to provide equally good light on the south or north side?—Not equally good light by any means, but probably sufficient light, if all the offices in Cotton-garden were removed.

180. By the offices in Cotton-garden, do you include Mr. Ley's house?—Certainly.

181. Do you consider that the removal of Mr. Ley's house would not only make room for the new Committee-rooms, but also give greater facility of ventilation for the new building?—I think it would.

182. And on the whole would also facilitate the communication with the present Library and the new House?—It would make a most material improvement in that respect.

183. The plan you contemplate also contemplates the eventually demolishing or abandonment of all the present official buildings connected with the House, with the exception of the Speaker's house?—It does.

184. By the official buildings are meant not merely the different offices, but the Committee-rooms also?—I understand so.

185. What buildings would you think it necessary to pull down?—I should probably

Sir *Robert Smirke.*

29 March 1833.

probably recommend the taking down of all those at the south end of Westminster-hall, and next the two sides of the present House of Commons.

186. Could you make the proposed alteration by the demolition of the old buildings and the erection of new ones without great inconvenience, supposing the House to be sitting?—I think that the removal of those offices immediately connected with the House of Commons should take place when the House is not sitting.

187. Would you have time during the recess to do that?—I think so.

188. And to erect the buildings in a satisfactory manner during that period?—These old offices should not be pulled down till the new ones are built.

189. Do you propose to erect any new buildings on the site of these old ones which you would demolish?—No.

190. I suppose you are not prepared to state what would be the expense?—I am not.

191. The second and third questions are as follow: "What sized and what shaped House would be best to afford accommodation for the Members, allowing two feet sitting, and three feet four inches from front to back of the seats; also accommodation for 50 Peers and for 150 strangers, separated from the Members of the House, to admit of the House dividing without turning out strangers?" and "Whether there should be a Gallery projecting or retiring, for the accommodation of any portion of the Members?" and the answer that you gave to those two questions is, that the size of the House will depend upon the decision of the Committee in regard to a Gallery for Members. If there is no Gallery, and the ample accommodation prescribed is to be given to 600 Members, you are of opinion that the House will be found inconveniently large for its purposes, whatever may be the form given to it. If the House were made of a semicircular form, like that of the Chamber of Deputies at Paris, by which the whole number would perhaps be brought together in the most compact form, the area of the room could not then be less than about 100 feet by 60 within the walls, exclusively of the passages of communication round the seats, and of the space which the seats for Peers and for strangers must occupy. Believing that such a room would be inconvenient, you are of opinion that a Gallery should be made, providing seats for about 150 Members; and if the Gallery were made to project not more than about four feet before the face of the wall under it, it would not obstruct the hearing nor the ventilation of the House; with such an arrangement the dimensions of the room might be very much reduced; and instead of giving it a semicircular form, you would prefer having its sides made straight and parallel, and the end opposite the Speaker's chair of a curved or semi-hexagonal form; and seats for the public might be well provided in recessed Galleries, behind that allotted to the Members. Would the dimensions of 100 feet by 60 be sufficient without any Gallery?—I think it would, exclusively of the seats for Peers and strangers.

192. But as to Peers and strangers, in what situation would you place them?—I should think they must be placed in Galleries behind the Members.

193. Like the French galleries?—Yes.

194. Supposing the Gallery for Members not projecting beyond four feet, do you propose that that should run both sides and round the semicircular end also?—Yes.

195. With that Gallery what sized House would answer?—I should think about 64 feet from north to south between the walls under the Gallery, and about 60 feet from east to west.

196. What area in that case do you allow for the floor; I mean by the floor, that part without seats?—About 20 feet by 30, including the Speaker's chair and table, and the seats for the Counsel and others not Members.

197. Do you propose the Speaker's chair to be at one end, close to the wall?—I should not place the Speaker's chair close to the wall; but no Members should have seats behind it.

198. Do you propose that the wall of the building shall be upright, or that the wall above the Gallery shall recede to allow a given space?—I should make the wall above the Gallery recede to admit of one seat.

199. Then the extreme width of the walls above the Gallery would be 70 feet?—It would.

200. How would you propose the Members to enter?—From a corridor under the Gallery.

201. Therefore that space would afford room for the Members?—Yes.

202. You provide also for the table of the House as it is now, about the same size, for the clerks?—Yes.

203. How would access to the Gallery be afforded?—From the corridor behind.

204. Would not the retiring Galleries for strangers, as proposed, affect the sound?—It would necessarily affect it in some degree, and means should be taken to render the effect as little injurious as possible.

205. Would not the projecting Gallery, though only four feet, materially affect the hearing?—I do not think it would at all.

206. Have you considered whether a complete circular shape, where a segment being cut off for the Strangers' Gallery immediately behind where the Speaker would be placed, as likely to be favourable for hearing, and to afford ample accommodation, without either a projecting Gallery or a retiring recess where the Members sit?—I think, if the circular form were preserved behind the Speaker, above the proposed seats, it would be a very inconvenient room for hearing; there would be in all probability such a reverberation of the voice that it would be scarcely possible to hear with distinctness: if the circle is not preserved, but a large segment is taken off by a straight wall behind the Speaker, it would still be liable to the objections which I have generally observed apply to semicircular rooms; it would be extremely difficult to prevent the reverberation of sound, and especially when there were but few persons in the room.

207. The fewer persons the worse the hearing?—Yes, certainly.

208. How many feet do you propose the Strangers' Gallery to be raised and to recede?—I should propose the level of the Strangers' Gallery to be regulated by that of the Members, so that a Member standing up in his seat in the Gallery would not interfere with the strangers. If such an arrangement were adopted, two rows of seats would provide for the 150 strangers.

209. Do you mean the 150 in the Gallery all round?—Yes.

210. Where would you then propose to place the Peers?—Behind the Speaker.

211. Have you considered where to place the strangers, when they are excluded during a division of the House?—I have made no detailed plan; but I should imagine that if the public are to be removed from the Galleries during divisions, they must go into the corridor by which they approach their seats.

212. Have you also considered the means of allowing the reporters to go backwards and forwards with ease and convenience?—It would necessarily form part of the arrangement.

213. You have stated that in any plan to be adopted, room should be provided for building suites of Committee-rooms adjoining?—Yes.

214. In contemplating them as plain rooms, and supposing 10 rooms 20 by 30, and 10 rooms 20 feet square, will you state a rough estimate of what the expense of one or two buildings to contain these rooms would be?—Probably about 25,000 *l.*

215. In the arrangements you have proposed, are the Committee to understand, that although you would not now erect the various Committee-rooms which would be required for the convenience of public business, yet that on that plan space should be allowed for erecting them from time to time, either as the present old buildings require repairs, or the inconvenience of having them at such a distance from the body of the House, might suggest and warrant the expenditure?—I should advise nothing to be done towards any new building until such a general plan were very maturely arranged, so that it could be carried into execution from time to time as the necessity arises, each addition forming part of the whole.

216. Now as the present access to the House is very inconvenient, have you directed your attention how to improve the access to the new House?—I have; but I am not prepared to suggest any satisfactory arrangement. I think, however, it should be an essential point with the Committee to have such an entrance provided for the Members that they may approach the new House conveniently and without obstruction at any time from those persons who are going to the Gallery of the House or to transact business at the offices.

Lunæ, 1° *die Aprilis*, 1833.

JOSEPH HUME, ESQ., IN THE CHAIR.

Sir *Jeffry Wyatville*, called in; and Examined.

Sir *J. Wyatville.*

1 April 1833.

217. HAVE you considered whether any alteration that you could suggest could make the present House of Commons suitable for the number of Members now belonging to it?—I have spent some days in trying to convert it, but have not satisfied myself. I mentioned before that I had sent to a Committee of the House in 1831 four plans, and I now submit them.

[*Handing in four Plans, marked* (A. No. 1,) (B. 1,) (B. 2,) (B. 3.)]

218. What do you call plan (A. No. 1.)?—That is a plan or mere hint for altering the old House.

219. Is plan (A. No. 1,) the plan that you would now recommend?—No, not now.

220. Then you give up that plan, which, in 1831, you submitted as likely to answer, by removing two of the piers?—Yes, one pier on each side; because it would not answer the purpose intended by the questions as now put to me.

221. That is, it would not give room for 600 Members, which is the number required to be accommodated?—No, not without putting galleries, and still leaving it very inconvenient. Of the other (1831) plans now submitted, plan (B. 1,) shows a new House at the east end of the present House of Commons.

222. By plan (B. 2,) you appear to have pointed out a site for a new House due east from the Speaker's house, leaving the present House of Commons open?—Yes.

223. Do you think that that plan, as so proposed, is the plan that you would now recommend?—No; I think I have a much simpler one. If the Committee were to adopt that, (B. 2,) they must build the Speaker a new house instead of the old house, taking all the present house of the Speaker for offices and lobbies.

224. Then by (B. 3,) you appear to have taken the space between Westminster-hall and the Speaker's house, forming the quadrangle north of the present House, as a place that would answer; do you still think that that would be a good situation?—No, I think I have found a better; as taking the Speaker's quadrangle would sacrifice too much antiquity that it is desirable to preserve.

225. Have you thought of any other mode by which the present House may be altered, so as to afford the accommodation required?—I have tried it many ways, and I cannot succeed with the old House at all to my satisfaction.

226. Then are the Committee to understand that you propose an entire new building to afford the accommodation which is required?—Yes, I think it would be more beneficial to the public; and here are five plans which I have prepared since I was first summoned by the Committee about a fortnight ago. [*Handing in five new Plans, marked* (C. 1,) (C. 2,) (C. 3,) (C. 4,) (C. 5.)]

227. Now, what are the advantages which you propose by the new plan marked (C. 1.)?—I take the old House of Commons for the lobby, and proceed to the eastward under the east window to the door of the new House.

228. Do you propose to place the new House due east of the centre of the old House, or is it to be placed to the southward, the north wall of the new House being on a line with the south wall of the old House?—Yes, and extending to the north wall of the Library.

229. The west side of your square of building extending from the old House to the Library?—Yes, going across Mr. Ley's garden; and in the space occupied by Mr. Ley's house I make an outer Library, or Writing-room, communicating from the House to the Library.

230. That is, forming an apartment west of your new House?—Yes, looking into the old quadrangle on the south side of the House.

231. Which would form a communication also between the old House of Commons and the Library?—Yes, serving at the same time for a Writing-room for Members.

232. What

232. What size do you propose to make the House?—About 100 feet by 70.

233. But that does not include the Lobby?—No; the House will be 100 feet by 70.

234. Will that 100 feet by 70 afford accommodation, allowing two feet sitting by three feet four from back to front of the seats for 600 Members?—Yes.

235. Where would you afford accommodation for 50 Peers?—By forming a Gallery over the upper one or two seats of the Members, and by receding seats in the centre for Peers and Speaker's orders.

236. In the gallery?—No, in the House, not in the Public or Strangers' Gallery, and with a Retiring-room.

237. An outer circle of two rows?—Yes, two rows, and the recess will hold 150 Peers and Speaker's orders.

238. Then for strangers?—For strangers I have a separate Gallery, to be arrived at by a separate staircase, and over the outer Library.

239. You mean to say that strangers are to be in a Gallery over where the Peers and Speaker's orders are?—Yes, and with a retiring Lobby.

240. Do you propose the strangers to enter by the same entrance as the Members do, or by a separate staircase?—A separate staircase.

241. Where does that go from?—From Cotton-garden, or from the outer Lobby. Then strangers would have a Lobby over the Members' Writing-room, which lies between the old House and the Library.

242. What would be the outer square of the building?—The outer square of the building, to include the passage from the old House into the new, would be 100 feet square.

243. Does plan (C. 1,) contemplate any improvement in the approaches to the House?—Yes, shown on each of the plans submitted.

244. Does it contemplate the roof of that House to be a flat roof?—I have not fully considered the construction; it requires study.

245. Now, as your opinion decidedly is, that the new building should be to the east of the old building, have you considered in what manner the approaches to the House can be facilitated?—Yes, I have.

246. State in what manner you think the greatest facility and best access would be obtained.—I can afford great facility in the access at no great expense, which is partly indicated on the various plans.

247. In plan (C. 2,) which you have presented, what are the advantages which you suppose it to have?—There would be more advantages, as it is larger, and perhaps handsomer than the last. It is shown in two different positions.

248. The building represented in that is a kind of amphitheatre?—Yes, with two recesses.

249. Only placed more due east of the present House?—Yes; the centre of the old House might be carried on direct through the new one, which would extend more northwards.

250. Is that the form of the building, and the place that you would recommend?—Having submitted such variety of plans to the Committee, it implies my doubts.

251. What are the dimensions of that semicircle, what is the radius?—One hundred and twenty by 105, is about the square of the building, and the radius of the Members' part is 50 feet.

252. Would that afford room for the 600 Members and the strangers?—Yes, it would.

253. Is there any other plan you would prefer to either of these?—Yes, (C. 3,) is the one I would prefer on the score of economy, because it would be the least costly, with nearly the same accommodation; it does not exclude the light from the old House or Library, but there are not so many offices, nor so handsome a building.

254. Now, describe that plan (C. 3.)—By the plan (C. 3,) I leave the old House a Lobby for the public, and I make the inner Lobby for the Members where Mr. Ley's house now stands.

255. Extending from the Library to the old House?—Yes, where Mr. Ley's house stands, opening to the House, and also to the Library.

256. What will the size of that inner Lobby be?—Fifty-two by thirty-five; but on large divisions I suppose a separated part of the old House to be used.

257. Occupying the whole space from the old House to the Library?—Yes; in fact it is 60 feet from the wall of the Library, but I take 10 off for steps down to the

Sir *J. Wyatville.*

1 April 1833.

the Library and conveniences. I propose to build the new House east of that new Lobby, in the space between the old House and the north wall of the Library, nearly on a line with the front of the Library, and extending 86 feet east to west, and 86 feet also from north to south, including the recesses; and the body of the House will hold 600 Members.

258. With all the other conveniences?—Yes, with a Gallery at the back of the Speaker, holding, for Peers and Speaker's Orders, 150, and a Gallery for the Public at the western end over the Members' Lobby, and extending three seats into the body of the House, so that there would be but three seats for Members under that Gallery.

259. Placing the Speaker at the east end of the House?—Yes.

260. Do you suppose that a person speaking under that Gallery would be heard by the Speaker?—Yes, I should think so, by a proper form of the soffit to those seats.

261. How many rows of seats do you put on each side the floor?—Ten.

262. Have you contemplated the building of a new House on the site of Mr. Ley's house and of the Library; and converting the whole of St. Stephen's Chapel into a Library for Members?—No, I have not, because it would be the cause of so much more expense.

263. But it could be done at a considerable expense?—Yes, certainly.

264. Have you formed any rough calculation of what the expense of such a building as you have now stated would be?—Yes; I have taken it from 40,000 *l.* to 50,000 *l.*, including all the Offices.

265. Do you take into your calculation that the whole of the space under the area of the new House is to be fitted up for the Offices that you remove from the south of the old House?—Yes.

266. And do you contemplate them all to be fire-proof?—Yes.

267. And the expense would not exceed 50,000 *l.*?—No, it would not exceed 50,000 *l.*

268. In your view of erecting the House, have you contemplated the leaving room for building any Committee-rooms, supposing it should be wished to remove the Committee-rooms now over the western part of the House, and at a great distance from the House; have you considered, with the ground plan before you, where you would have accommodation for building them?—Yes; the Committee-rooms might be extended either to the south of the House before the Library, or the north of the House before the Speaker's Dining-room, that Dining-room then to be lighted by the side windows below. There you would have as much space as you like.

269. In reference to the keeping of the present site for a new House, supposing it to be widened to the extent of the Cloister on the one side and the Ingrossing Office on the other, there would be a space of 65 feet, which very nearly doubles the present House of Commons; and supposing the space extended to the east by Solomon's Porch to admit of a Gallery, would not there then, with Galleries as there are at present, only thrown back, be sufficient space for 600 Members?—Yes, there might; but I do not think it advisable, for this reason, because it would be destroying at a great expense a building that is already useful to form a Lobby, and erecting another that would cost you full as much money to build as a new House on an adjoining spot, whilst by building on the old site you would still be short of a good Lobby.

270. Are the Committee to understand that after all the trials you have made to alter the old building by alterations for accommodation of the Members, you do not think it so advisable as building an entire new House east of the present one, leaving that for other uses?—I say that I have the greatest desire to preserve the old House; but from the utmost study, and placing the seats in almost every possible way, (and I have now in my hand four sketches in pencil showing the taking down either one, two, or more piers on each side of the House), trying the Speaker's chair on the east, west, north, and south, it is utterly impracticable, though 600 Members might be crammed in, to make it so as to warrant its being recommended in preference to building a new House adjoining, that would be considered the same revered spot, and not cost much more money; an opportunity would also be lost of making good offices, and clearing away the paltry excrescences that disfigure the present venerable structure.

271. Do you not think that placing a building from the south side of the old building to the Library would in some degree interfere with proper ventilation?—No,

No, I think not, and especially if you make an open passage through on the lower story towards the east.

272. The plan which you recommend most is, (C. 3,) is it?—I think so; but I submit that to the judgment of the Committee; it might be extended and be made handsomer.

273. Do you prefer a semicircular shape to an oblong?—That is difficult to say; I have never made my mind up about that.

274. After deliberate consideration, what shaped House would you prefer?—I think I should prefer an oblong or square, with a portion of the seats circular, and my reason is this: I think one should hear better in a square House than when the walls were circular, unless the person speaking was in the focus.

275. Do you believe it is possible that, in a House in which there is no Gallery, you can hear as well as you can in a House in which there is a Gallery, with equal accommodation for Members, strangers, Peers, and Speaker's orders?—I do not think it would make any difference; I never tried that.

276. The question meant to be put was this, whether, by having a Gallery round, capable of holding 150, you would not be able to reduce the size of the body of the House, so as to admit of the whole being better heard?—I think they would hear as well in a small House with a Gallery as in a large House without one.

277. Then, would the putting of a Gallery or not alter your opinion with regard to the shape of the House?—No, I do not think it would alter my opinion, supposing the Gallery to be made circular in the front only.

278. Would not the ventilation under the Galleries be in some measure impeded?—No, there is no necessity for that, because you might carry flues out from under the Gallery.

279. But unless you did so provide by openings, there would be undoubtedly some impediment to the ventilation?—Yes, there would be some stagnation.

280. Would it not be more difficult to supply air to these 600 persons, if they were put in a smaller space, without making draughts?—Yes, the larger the room the less the draught would be.

281. And the better the ventilation?—No doubt about it.

282. Suppose a new House to be determined on, how long do you think it would take in building?—One year full. That is another advantage in building a new House; because that might be done, and all the offices below, before destroying the old one.

283. Do you mean to state it could be done within the year?—It would not be advisable to be done within the year.

284. Then what time would you recommend, as giving the best chance for the work being well done?—I should say a year and a half.

285. How long do you think it would be before it would be in a state to be safely occupied by the Members?—I should say three months longer, that it might be well aired, and dried with stoves.

The two other drawings are (C. 4,) showing (C. 2.) reversed in position, putting the Speaker on the west side of the proposed new House, and his back towards the east end of the present House.

And the drawing (C. 5.) shows a proposal for building a new House of Lords, and using the old one for the House of Commons.

A slight view of this plan will show how compact both Houses, with their respective Libraries, &c. would become.

It leaves the grand Entrance, new Galleries, &c. lately erected for the House of Lords untouched. It converts the present House of Commons into a Lobby, and leaves the Speaker's house untouched.

It shows an idea of a public Terrace from Westminster-bridge to Abingdon-street on the bank of the Thames, and for a raised private Terrace within it for the Members of both Houses, and one also for the Speaker.

It is almost self-evident that no spot can be more eligible than about the present site, considering the union of business, the frequent necessity of the Judges being called upon unexpectedly to meet to give opinions, &c. &c.

Martis, 16° *die Aprilis*, 1833.

JOSEPH HUME, ESQ., IN THE CHAIR.

Sir *John Soane*, called in; and further Examined.

Sir *John Soane.*
16 April 1833.

286. HAVE you prepared a rough Estimate of your design for building a new House of Commons?—I have. In this Estimate is comprehended every thing that I conceive will be necessary to carry the whole plan into effect.

[*The same was delivered in and read, as follows:*]

"A rough Estimate of a design for building a new House of Commons on a site eastward of St. Stephen's Chapel, and for making various alterations and improvements in the buildings connected with the two Houses of Parliament, viz. to clear and excavate the site, remove the loose earth, and prepare the foundations for the new building, formed of broken granite and Dorking lime grout, and labour ramming the same.

"The new building (as suggested), to contain a House of Commons 75 feet wide, 85 feet long, and 40 feet high, with a Corridor round the same six feet wide, Rooms for the Speaker, an Ante-room and Gallery for Reporters, and a Gallery for Strangers, with a separate Staircase leading thereto, Offices beneath the House for the Clerk of the Fees, the Committee Clerks, Journal Office, Ingrossing Office, Vote Office, Depositories for Sessional Papers, &c. The whole to be fireproof, and the finishings and decorations to be of a plain character.

"Apparatus for warming and ventilating the building.

"Works requisite for shoring up Mr. Ley's house, the east end of the present House of Commons, and parts of the Speaker's house connected therewith, preparatory to excavating the site of the proposed building.

"Levelling the ground, making good and paving round the new building, forming new footpath from Cotton-garden leading to the staircase to the Reporters' and Strangers' Galleries, new fences, &c.

"Taking down the old buildings containing the Clerk of the Fees' Office, Journal Office, Ingrossing Office, Vote Office, &c., and making good the external walls, &c. of St. Stephen's Chapel and Mr. Ley's house, and levelling and paving the site of the buildings removed.

"To remove the wainscoting, galleries, and ceiling of the present House of Commons, and re-instate the interior of St. Stephen's Chapel as far as practicable to its former condition, and fit up the same as an ante-room to the new House of Commons.

"To shore up the east end wall, cut aperture therein to form communication with the new building, and turn a stone arch to carry the wall above.

"To open three new windows on the south side of St. Stephen's Chapel.

"To alter and improve the present Lobby and the Rooms over the same.

"To improve the communication between the House of Commons and the House of Lords from the Long Gallery, likewise the outer Lobby and Passages leading to Westminster Hall and to Old Palace Yard, agreeably to the accompanying Plan, No. 4.

"To open two new Windows on the south side of the Speaker's State Dining-room, as the light from the three windows at the east end of the room will be considerably diminished by the plan proposed.

"The estimated amount of the foregoing Works is - - - -	£. 36,750
"Add, for the Architect's commission, clerk of the works, and incidental expenses - - - - - - - - - -	2,050
Total - -	£. 38,800

"28th March 1833. "*John Soane*, Architect."

" House of Commons, 16th April 1833. Sir *John Soane.*

16 April 1833.

" Estimated Expense of the design, No. 3. The new House of Commons, being on the site of Mr. Ley's house and garden, 75 feet long, 62 feet wide, and 42 feet high, with Galleries therein, together with the various alterations to improve the communication between the House of Commons and the House of Lords, shown in the plan - - - - - - - - - £. 33,000 Plan 3.

" Architect's commission, clerk of the works, and other incidental expenses - - - - - - - - - - - - - - 2,000

£. 35,000"

287. When you were last examined you stated that you doubted how far you would place the new building (which you were of opinion should be east of the House of Commons) directly to the east, in a line with the present House, or situate between it and the Painted Chamber; will you state the result of your further consideration upon that subject?—In my former examination, I spoke of two situations which I conceived were eligible, and I rather wish to submit both the plans to the Committee, making such observations upon them as appear to me to be needful to illustrate my intention.

288. Will you state the difference between the two plans, and the advantages which you think each of the plans possesses?—The plan No. 1, is a design for a new House of Commons, due eastward of the old House of Commons, with an immediate communication from the old to the new, making the present House an Ante-room or a Lobby to the new House of Commons. One great advantage of this plan is the direct access and easy communication it affords to the Members. If it was thought necessary to lower the floor of the old House of Commons, from the examination of certain papers containing observations made many years ago, it appears to me that the floor of the old House of Commons might be lowered to the same level as the Lobby of the House of Commons, or something very near it, saving the two steps; those two steps are not regular steps; they do not rise altogether above nine inches and a quarter. I wish to speak with great caution upon this subject, because the alterations in converting St. Stephen's Chapel into the House of Commons were made by Sir Christopher Wren, and I must presume he had good reasons for not keeping the floor of the House of Commons and that of the Lobby thereto on the same level.

289. Are the Committee to understand that you would propose to place the level of the new House on the level of the present Lobby?—As near as I possibly could. The next thing I would observe in this plan is, that there is no alteration made in the approach of the Speaker from his own house to the new House of Commons.

290. In this plan do you propose removing Mr. Ley's house, and the other buildings in that situation?—Not in this plan.

291. How would you open any communication with the Library, or how would you make the communication with the House of Lords easier than it is at present?—I propose to raise the floor of the Lobby, which forms the communication between the Long Gallery, the Ingrossing Office, and the Ante-room to the House of Lords, to the level of the floor of the House of Lords, (viz. about three feet six inches above its present level) and consequently to remove the seven steps which at present lead therefrom up to the House of Lords, and to lessen the descent from the Lobby of the House of Commons by the same number of steps, to increase the length of the remainder of them two feet. By this alteration the necessity of descending 15 steps, and then ascending seven, into the House of Lords, will be avoided, and the access thereto from the House of Commons will be rendered easy and convenient. A sufficient number of steps must be formed, projecting into the Long Gallery, to lead down into the same from the Lobby, the floor of which is proposed to be raised. I further propose to raise the floor of the outer Lobby of the House of Commons one foot, to remove the two steps in the doorway leading therefrom into the Ante-room to the House of Lords, and to alter the steps between the Gothic screen and the Lobby of the House of Commons, as shown in the plan marked No. 4.

292. Do you propose to make a facility of communication between the Library and the new House?—According to this plan it remains as it now is, which I consider an objection, but you cannot get any other communication than the present

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one through the Long Gallery without removing Mr. Ley's house. If Mr. Ley's house could be removed, then a direct communication might be obtained between the Library and the proposed new House of Commons, upon the site of his house.

293. Could that situation be also made available for Committee and other rooms which are wanted for the accommodation of public business?—I should think it might; and for that purpose I beg to offer another plan (No. 2.) to the consideration of the Committee.

294. Will you now state any observations you have to make upon plan No. 2?—In that I propose to take away Mr. Ley's house, and the Ingrossing Office, and the Clerks' rooms, and all that mass of heterogeneous buildings connected therewith south of the present House, and in lieu thereof I would make a direct communication from the new House of Commons into the House of Lords. On the site of Mr. Ley's house I propose to erect a large Lobby communicating with the new House of Commons. From this Lobby you descend to that adjoining the Long Gallery and House of Lords by as many steps as bring you on a level with the House of Lords, the floor of that Lobby being raised to that level.

295. Is four the whole difference between the level of the new House and the level of the House of Lords?—Yes; it is, in fact, little more than three feet, and the descent of that three feet is provided for by steps placed near the end of the present Long Gallery.

296. What use do you make of the present House of Commons?—Just the same as in the former plan.

297. How do you go out of the present House of Commons into the room which lies between the present House and the Library?—By folding-doors at the south-east corner of the old House, and from thence in a direct line to the Library.

298. Of what dimensions would that intervening room between the Library and the old House be?—About 45 feet by 36 feet.

299. Then you would propose to have an Ante-room to the new House communicating on the north with the present House, and to the south with the Library?—Yes.

300. Would that afford accommodation for Committee-rooms above and below?—Certainly, very ample.

301. Would they be well lighted and convenient?—Yes, both.

302. And without interfering at all with the lights of the Library, but adjoining the Library?—Exactly so.

303. East of that ante-room you propose the new House?—Yes.

304. Is the House which you have proposed in this plan to be of the same dimensions as the other plan?—It is the same in the design I have now before me (marked No. 2) as in that marked No. 1; but I have likewise prepared another design which is attached to this drawing, and marked No. 3, in which I have assumed that you would admit of a Gallery in the House, in order to reduce the very large dimensions of the area proposed in the other designs. The width of the House in this design, instead of 75 feet, will be 62 feet; and the length, instead of 85, will be 75 only; the height will be 42 feet.

305. How many will that accommodate?—It will accommodate 440 Members in the body of the House, and 160 in the Gallery.

306. What kind of a Gallery do you propose; an advancing or a receding Gallery?—An advancing Gallery, about eight feet in width.

307. Do you think that would interfere much with the hearing in the House?—Not materially.

308. Where, in this plan, do you place the accommodation for 50 Peers and the accommodation for strangers?—The accommodation for strangers is proposed to be in a receding Gallery at the east end of the new House, somewhat elevated above the Speaker's chair; I propose the first row of this Gallery to be kept entirely apart for the use of the Reporters, and behind them will be seats for the public.

309. Where do you propose to place the Peers, so that a division could take place without the necessity of turning out either the Peers or strangers?—The Peers the proposed to be accommodated in a Gallery at the west end of the House facing are Speaker, over a portion of the lower corridor.

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310. Will you state the advantages which you think this reduced sized House will have over a larger one?—It would be less expensive, and as it materially reduces the area of the House, of course the voice of any one speaking would be more distinctly heard.

311. Would not the Gallery tend to render the sound less audible?—Not materially; if it was a great projection, I should say it would.

312. Are you aware that the spaces under the Gallery in the present House are considered very inconvenient for those Members who intend to speak in a debate?—I should think they are.

313. Would not the same objection lie to the spaces under the Galleries in your proposed second plan?—Not in so great a degree, the projection of the Gallery being less.

314. What would be the difference of expense between the two plans?—About 4,000 *l.*

315. Which would be the preferable House for hearing, in your opinion?—The smaller House.

316. Notwithstanding the objection of the Galleries?—I should think so; I have no hesitation in saying, that if the House could be erected without a Gallery, it would be better than with a Gallery; but considering the number of Members to be accommodated, and the great area necessary for that purpose if there was no Gallery, I think the plan with the Galleries is preferable.

317. Will not one of the great expenses of the new House of Commons be the foundation?—It will be a great expense certainly.

318. What is the proposed access for strangers in the second plan?—It is the same in both, from Cotton-garden.

319. Then the approach for Members to the new House would be through the old House of Commons?—Yes, through an aperture on the south side, leading into a large Lobby connected with the new House.

320. Do you propose to make any use of the present House more than as a sort of great ante-chamber?—If any addition is wanted to the Library, I see no reason why it should not be obtained there.

321. Do you think that if it were in contemplation to build not only a House of Commons, but a complete series of Committee-rooms, it might be better to build a new House upon the continuation of the line of the old House of Commons?—Yes, I should think it would; indeed, I gave it as my decided opinion that the best site for a new House of Commons would be eastward of the present House of Commons. This plan was only made in order that the advantages and disadvantages of both plans should be before the Committee, and that they might be able to judge of their respective merits by comparing them together. With reference to the design, No. 1, I take leave to observe, that if a Gallery is permitted, the dimensions of the House might be lessened, and the expense diminished in the same proportion as in design, No. 3.

322. Is not the approach to the new House of Commons, according to your second plan, somewhat less convenient than in the first, inasmuch as it is not by a straight line?—Decidedly.

Mr. *Edward Blore,* called in; and Examined.

Mr. *Edw. Blore.*

Plan 10.

323. YOU are an Architect?—I am.

324. Have you considered whether any alterations can be made in the present House to render it suitable for the convenience of the Members?—I have considered that, but I do not see well how that can be accomplished.

325. Upon the present site, can you, without taking away any of the material offices, enlarge the present House, so as as to accommodate the number of Members required?—I do not think that could be done, supposing that the space is to be allotted to each Member which has been specified in the directions, that is, a space of three feet four by two feet.

326. When you say that, do you or not contemplate a Gallery?—I do not see how you can extend the Galleries in the present House.

327. Then you mean without a Gallery?—It cannot be done without a Gallery certainly, and not without a great extension of the existing Galleries.

328. Then you have come to the conclusion that a new House should be erected?—I have.

329. Are you prepared to state in what situation you think that House should be placed? I am.

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330. Have you brought any plan with you?—I have brought a sketch which I have prepared. [*The Witness delivered in the same.*] My plan is to erect a new House of Commons, partly upon the site of Mr. Ley's house, and to extend it in the garden towards the River. By that means I escape the inconvenience of disturbing the light of the Speaker's Dining-room; I also by placing it in that position, and by placing at the back of it a Lobby or Gallery, am enabled to form a communication between the present House of Commons as a Lobby, and the new House of Commons and the Library.

331. Then you contemplate removing Mr. Ley's house and all the line of buildings in that direction?—Yes.

332. Then you propose to occupy the space between the old House and the Library at the east of that space?—Yes.

333. And the space between the Library and the old House is to form the Lobby of communication?—It is.

334. What is the size of the House you propose?—I should say about 60 by 90; I believe the exact space is 60 feet from wall to wall, between the walls of the present House and the Library, leaving a space for the accommodation of Members of about 56 by 88.

335. How many would that accommodate?—It only accommodates 554 without the Gallery.

336. Where do you place the Speaker?—At the east end, about 12 feet in advance.

337. Where do you place the strangers?—At the west end in a Gallery, and the Peers also at the west end below the Strangers' Galleries.

338. How do you approach the Strangers' Gallery?—By a separate staircase from Cotton-garden.

339. Do you consider the oblong form to be the most convenient?—It appears to me the most convenient, and the best suited to the situation.

340. Do you not think that the length of the building would be prejudicial to the sound?—I think not; I think any person speaking in any part of that House would be perfectly heard.

341. Where would you place the additional 100 Members?—In a shallow Gallery about eight feet wide, occupying the two sides; and I propose to form a separate Gallery with a separate communication above the Speaker for the Reporters.

342. Is there a passage all round outside?—Not all round, but on each side.

343. How do you propose the Members to enter the House; would they have to cross the floor as they do now?—Yes, they must cross the floor; to have made a clear passage at the back, would have diminished the accommodation to the extent of about 80 seats.

344. How many Peers do you propose to accommodate?—I have put down 60, six benches of 10 each.

345. How many do you suppose the Cross Gallery for strangers will accommodate?—One hundred and fifty.

346. Do you consider that situation preferable to having the House directly at the east of the present House?—I think that it interferes less with the light of the Speaker's Dining-room, and I think it is a better place for general communication.

347. Do you propose making offices under the site?—Yes, I have prepared a little sketch of the offices underneath.

348. Do you propose that the area underneath should afford accommodation for the offices that would be removed?—Yes, all the offices disturbed by this plan would be provided for underneath.

349. Have you formed any estimate of the expense of this plan, and all the buildings?—Yes; I should say about 17,000*l.* would be required.

350. You think that would be sufficient to remove the present buildings, and erect all the new?—Yes.

351. Have you examined the House to see whether any more direct communication could be made between the new House and the House of Lords?—I do not see any new communication that could be formed, but I propose to improve the existing communication. There is a narrow staircase which leads up to the Private Bill Office, and by doing away with that staircase, and instead of descending into the Gallery, and then ascending again into the House of Lords, I propose to adjust

the levels at this point occupied by the small staircase (*pointing it out upon the plan.*)

352. Are the Committee to understand, that fitting up in a plain manner all the offices underneath the area of the new House, as well as the communication between the House of Commons and the Library, the amount you have stated would do the whole of it?—I think it would.

353. Have you attended at all to the foundation of the building?—It would be no great expense in the way in which foundations are now formed.

354. Are you aware that you would have to go down to the gravel?—I do not suppose that I should have to go further than I went at Lambeth Palace, that was about eight feet; the foundations there cost about 400 *l.*, and I presume the same thing would answer the purpose here.

355. What kind of a roof would you give the House?—A flat roof.

356. Have you attended to the manner in which the sound might be affected by the Gallery?—I am not prepared to speak with certainty, but I presume that the effect would be much the same as it is in the present House, only I should not have so deep a Gallery.

357. Do you consider that this plan would be better than a circular building?—I am not prepared to say that this is a better form than that, but I think it is a form in which the sound would be perfectly well heard; and as it regards the appearance of the building and local circumstances, I think it is a better form.

358. According to your plan would not a great portion of the Members be about 70 to 90 feet distant from the Speaker?—The most remote would be about 70 feet.

359. How long do you consider it would be necessary to occupy in erecting this building?—I should think from 16 to 18 months.

360. Of what materials would you propose to make the exterior?—The exterior of Bath stone, and the rest brick.

361. Staircases of stone?—Yes.

362. Would the timber to be used be oak?—Not exclusively; it would be oak and the best Baltic fir.

363. Would the lower premises be fire-proof?—All fire-proof.

364. Would you propose lining the House with wood, or plastering it?—I should line it as high as the Gallery, and plaster it above.

365. Are you not afraid of the wood lining interfering with the sound?—I think it would be a conductor of sound; plaster would be more likely to produce echo than a wood lining.

366. What height would you propose from the floor of the House to the ceiling?—I have not well considered that point; I should just carry it high enough to have the Galleries, and to have a sufficient space above, say 30 to 40 feet.

367. What rise would you give in the benches?—I should say about a foot in each bench; that would make the back seat seven feet above the level of the floor; and I would place the lower part of the Gallery about eight feet above the highest bench.

368. Have you considered how you could alter the situation of the House, so as to have the Members entering only from the sides from vomitories, and never crossing the floor of the House?—It is provided for in this plan, but the number of seats I have stated supposes a bench at the back.

369. Would the Gallery make much difference in the expense?—If there is no Gallery the area must be very much increased; I should say it would very much increase the expense to have the accommodation required upon the ground without a Gallery.

370. Would the extended space necessary to accommodate the whole number of Members on one floor add very much to the expanse of the roof?—That would depend upon the way in which it was done; if the building was widened it would add very much to the expanse of the roof; if it was merely an extension in length it would not so much increase the expanse.

371. Making full allowance for all expenses, might it be estimated that 20,000 *l.* would cover all?—Certainly.

372. Do you include in that the alteration of the levels between the House of Commons and the House of Lords?—No, that would be an extra expense.

373. Have you included in that estimate the expense of altering the present House of Commons?—No, that would depend upon the nature of the alteration that was made.

374. You have seen the plan of the original House of Commons?—I have.

375. Have

Mr. *Edw. Blore.*

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375. Have you considered the expense of restoring it to its original state?—That is a question which cannot be answered without an examination of the present state of the building behind the wainscot. It is possible that every thing may be cut away. I should not venture to propose to restore the old building below the level of the windows. I would beg leave to point out one advantage of the plan I propose, which is, that you may have it completed without disturbing the present House.

Mr. *Decimus Burton*, called in; and Examined.

Mr. *D. Burton.*

376. ARE you of opinion that any alteration can be made in the present House by increasing its dimensions in any way, so as to enable it to afford accommodation required for the number of Members?—No; I do not think it is possible to alter the present House to be a good hearing room and seeing room, affording at the same time accommodation for 600 Members, 50 Peers and 150 strangers, the sittings each being three feet four inches by two feet.

Plans 17, 18.

377. Have you formed any opinion as to the situation best adapted for a new House, and what kind of a House you would recommend?—Yes; and I have prepared a sketch to explain my ideas on these points, [*producing plan No.* 1.]

378. This plan contemplates the erecting a new building south-east of the present situation, half way between the Library and the old House?—Yes; I preserve the old House, for the following additional reasons: viz, that it may be used for public business during the erection of the new House, and also because I consider it is a valuable relic, historically as well as architecturally; and I trust, at some future time, it may be restored, in all its original beauty; but it is not necessary for my plan that that expense should be incurred at this time. The new building I propose would be advantageously placed for light and ventilation. It is a rectangle on plan. The exterior dimensions of which are 93 feet from east to west, and 81 from north to south. Internally, the House will be semicircular at each end, the area being 82 feet by 62, with a corridor six feet wide entirely round it. The Speaker's seat is towards the east end.

379. What would be the distance from the Speaker's seat to the outer circle?—Sixty-two feet.

380. Would it be possible for the Speaker to distinguish the Members well at that distance?—Yes, I consider so, judging from the effect observed in churches, theatres, and other large rooms; and I find Mr. Saunders, in his Treatise on Theatres, states he found by experiments that the voice could be heard well at a greater distance.

381. By placing the Speaker here, do you contemplate that the Speaker should have every Member in view at his seat?—Yes, excepting the few who might on occasions be at the east end of the Gallery.

382. Have you calculated the number that would be seated in that area?—Yes; and I have prepared a sketch, showing the seats in the body of the House, [*producing another plan, marked No.* 2.] By this plan it appears there would be 480 seats in the body of the House. The remaining 120 seats are in the Gallery.

383. Does the Gallery project or recede?—It projects about seven feet only. A larger number of auditors may, by means of a gallery, be contained within a given cubical area; and I consider that a retiring gallery would render the room bad for hearing.

384. Where is the Strangers' Gallery?—It may either be facing the Speaker, or placed, as well as the Peers', behind the Speaker's Chair; and in this case, the Chair would be advanced considerably towards the centre of the House.

385. How do you contemplate the Members to enter; by the floor or by vomitories from the sides?—By both; that is to say, by a large gangway in the centre, and by nine or more doors from the surrounding corridor.

386. Do you give the preference to the oval shape?—I give the preference to the form of plan shown by my sketch, because I think it would be a good hearing and seeing room, and at the same time suit the mode of debating which I have observed is practised in the English House of Commons, where Members sometimes give replies across the House, on those occasions not addressing the Speaker. I conceived this practice of Members speaking from their places was to continue; and in such case, a proportion of the seats should be straight, and particularly

cularly where the Members sit who principally take part in the business. I do not consider a semicircular House would be suitable for this mode of debate. The radius of such a House must be very large to allow of the required accommodation.

387. Would not that create an echo?—I do not suppose that the form I have recommended would produce an echo.

388. Where would you put the Reporters' Gallery?—In the front seat in the Gallery, or, as I before observed, they might be placed with the other strangers behind the Speaker.

389. What is the distance from the Speaker's Chair to the Bar, upon your plan?—Thirty-five feet. This would be less if the strangers are placed behind the Speaker.

390. Are you aware that the distance in the present House from the Speaker's Chair to the Bar is 30 feet?—Yes.

391. What proportion of the number of Members you propose to accommodate will sit at a greater distance than the present Bar from the Speaker's Chair?—As 199 to 271. I consider that as recesses in, and projections on, the walls would be avoided, the voice would be audible in all parts of the House.

392. In calculating the space of three feet four for each person, have you calculated that that space should be allotted without the feet of the person sitting behind going under the seat of the person sitting before?—I have; but I submit that that allowance is more than requisite, where so many vomitories are provided. If the dimension was reduced from three feet four inches to three feet, the length of the House could be lessened five to six feet. The backs of the seats should also incline outwards; and thus additional accommodation is given.

393. How much does each seat rise above the one immediately before it?—I propose each seat should rise in an increased progression, beginning with four inches for the lowest step, and increasing to one foot eight inches the top one, the total rise being seven feet.

394. Have you also prepared a sketch of the Gallery according to your plan?—I have. [*The Witness delivered in the same, marked No.* 3.]

395. What accommodation would the Gallery contain?—One hundred and twenty seats for Members, at three feet four by two feet, and 150 for strangers, including reporters, two feet two inches by one foot eight each.

396. How much would the Gallery project?—Seven feet to the outside.

397. How do you propose the approach to the Strangers' Gallery and for the Peers?—I keep them each perfectly distinct from the entrance for the Members.

398. In this plan do you contemplate the removal of Mr. Ley's house and the office of the Clerk of the Fees, and, in short, all the buildings south of the present House?—Yes, with the exception of the Long Gallery.

399. How do you communicate with the Library and with the House of Lords?—To both through the new Lobby; from thence direct to the House of Lords; to the Library, by a descent of six steps in a passage entering that room on the north side; the upper Library being entered in the same manner from the upper Lobby.

400. How would the present House communicate with the new Lobby?—Ultimately through the new Corridor or Lobby, when erected on the site of the present offices; but as it would not be convenient that these offices should be pulled down until the new ones are built, I propose, in the meantime, a doorway should be opened from St. Stephen's Chapel to the new Lobby, and in this way the business of the House would proceed without interruption. The communication might afterwards be kept open or closed, as convenience might dictate.

401. Do you propose to erect the new offices upon the area under the new House?—Yes.

402. Then the old House will not be a passage-room to the new House, according to your plan?—Not the only passage.

403. From the Lobby to the new House how do you communicate to the House of Lords?—By a straight Corridor or Lobby leading direct to the present side doors of the House of Lords and its vestibule, which open into the Long Gallery.

404. Do you contemplate the level of the new House to be that of the level of the old House, or the level of the Lobby?—The level of the Lobby.

 405. What

Mr. *D. Burton.*

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405. What would be the difference between the level of the new House and the level of the House of Lords?—About three feet; the floor of the Long Gallery being raised to the same level as the new House. At present you go down 14 steps and come up seven, in all 23. In my plan six steps are all that will be required.

406. How do you contemplate the corridors to be lighted?—By a range of skylights.

407. If you did not keep open the communication with the old House as a Lobby for the new, would there be any objection to placing the floor of the new House on a level with the floor of the House of Lords?—None, in either case, because there would still remain height for the new offices under the floor of the House, if lowered to the level of the House of Lords, and the private entrance-passage for Members from the outer Lobby taken off the staircase that leads to the Gallery of the House of Lords may be on either level.

408. Supposing a semicircular form were preferred, would there be any inconvenience or difficulty in extending the House northward?—It would intercept all the light of the State Dining-room, and injure that of other principal rooms in the Speaker's House, and nearly all of the light of the present House of Commons.

409. Is that one of the reasons why you have made it in its present shape?—No; I conceive that this shape is preferable, both for hearing and seeing, as applied to the House of Commons.

410. Do you propose that the new Lobby to the new House should have rooms above and below that could be appropriated for Committee-rooms?—Yes; the upper room or Lobby may be a refreshment room; and there would be Committee-rooms below, and rooms also at each corner of the building. The addition of these would perhaps permit of the removal of the ruinous Committee-rooms now standing against the east windows of Westminster Hall.

411. Have you also prepared another plan, showing the Gallery and the upper story?—I have. [*The Witness delivered in the same, marked No.* 4.] I have also prepared a plan, showing a method of lighting the House. I would light the House by a range of panels close to the ceiling, which should open into a corridor lighted by skylights, or rather turret-lights; and I would ventilate the House by means of the spacious corridor, in which I would have both cold water-pipes and hot water-pipes. The air which would pass into the House would be modified in temperature, and thus rushes of hot or cold air would be avoided. I would also propose at night to put lamps with reflectors outside in the Corridor; the House would thus be lighted through the panels in the same manner as by day. I think similar reflected lights might be in the ceiling, and chandeliers be dispensed with, a mode of lighting distressing to the eyes, and which produces much heat, and by consuming the oxygen, deteriorates the quality of the breathing air; that would give sufficient light, and it would avoid the great heat occasioned by the candles.

412. Would those panels give sufficient light in the day time?—In addition to these panels there are windows in the sides and end of the House opposite to windows in the corridors.

413. As you propose that the lamps should be in the corridor, how would you prevent them from contaminating the air in the corridor, by means of which you propose to ventilate the House?—Fresh air in profusion may be admitted into the corridor without inconvenience, and if this air becomes over-heated it would naturally ascend, and means are provided for its passing off at the top of the corridor, the ceiling of which is above that of the House.

414. Could you not also connect with the lamps some apparatus for carrying off the bad air which they generated?—Certainly; the mode I propose is to enclose the lamps in glass cases, chimnies from which would pass to the roof, as in some of the shops in London.

415. How would you avoid the inconvenience of foul air collecting beneath the Gallery?—I would form the ceiling sloping outwards and upwards from the wall; I think that would assist the sound also.

416. What style of architecture do you contemplate for the building?—I have considered the new building to be in external character conformable with that of the new Library, and of the buildings erected of late years in that vicinity.

417. Have you formed any estimate of what the new House, with the alterations you have mentioned, would amount to?—I am able only to form a rough estimate at this time, and from which it appears the quadrangular building containing the new House would, I consider, cost 28,000 *l.*; if made fire-proof, the cost would be greater.

Mr. *D. Burton.*

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418. Do you include in that the fitting up the benches and the Gallery, and the offices underneath?—I have included the cost of the rough benches, but not the leather seats or other furniture; I include also the cost of the offices underneath the House, but not the foundation, which, in consequence of the situation near the River, will require additional precautions; the cost of which may amount to 3,000*l.*

419. What have you estimated for the new Lobby and all the building west of the new House to the House of Lords?—As near as I am able to judge, before working drawings and specifications are prepared, I calculate the cost of those buildings will be about 10,000 *l.*

420. Does that include removing the present buildings?—Yes. The value of the materials would more than pay for their removal.

421. How do you propose building the House; entirely with brick, or faced with stone outside?—With brick, corresponding with the buildings last added to the two Houses of Parliament. The House of Commons, therefore, would not stand out as a distinct public building, but would be contained in a pile, which would appear a continuation of the Parliamentary Offices before alluded to, and with which it might be connected at a future period, by bringing the Commons' Library forward to the front; the present rooms to be used for Committees. An expensive exterior for the new House can hardly be recommended, unless the neighbouring buildings are beautified at the same time, and in the same character.

422. Would that amount of 41,000*l.* cover all the expense that you think likely to be incurred?—I conceive it would, except one alteration, which I have not yet alluded to, and which I think might be carried into effect with advantage, viz. the enlarging the approach from Westminster Hall, as shown on my sketch.

423. How would you propose to finish the walls internally?—I propose to line the House entirely with wood.

424. What sort of wood?—It might be either deal or common cedar. I should prefer a wood not requiring to be painted.

425. What is your reason for making the benches rise in an increased ratio?—I find this to be the case in the lecture-room at the Royal Institution; a room generally considered to be excellent for hearing and seeing.

426. What time do you consider would be necessary for the erection of this building?—I think the rectangular building might, with great exertion, be erected in eight months.

427. Would you, as an architect, recommend that it should be finished in eight months?—Certainly not; it would be much better for the building that a longer time should be allowed.

Mercurii, 17° *die Aprilis*, 1833.

JOSEPH HUME, ESQ., IN THE CHAIR.

Mr. *Thomas Hopper*, called in; and Examined.

Mr. *T. Hopper.*

17 April 1833.

428. HAVE you had an opportunity of examining the present House of Commons and the adjacent buildings?—I have.

429. Is it your opinion that any alteration can be made in the dimensions of the present House of Commons, so as to afford sufficient accommodation for 650 Members?—My opinion is, that any attempt to make the space contained within the walls of the present House of Commons sufficient to hold its Members according to the number prescribed to me, giving them the space intended to be allotted to them, would only be a great expense, and end in complete disappointment.

430. Suppose that smaller dimensions were given, say three feet by 20 inches, do you think that even with those reduced dimensions the present House could be altered so as to afford sufficient accommodation?—I should certainly not advise such alteration.

431. What do you think would be the proper dimensions to allow for each Member, considering the length of time they have frequently to occupy their seats, and the fact of their being obliged to pass each other?—If it was merely as to the sitting, I apprehend, upon an average, the space of one foot eight in width by two feet ten, would be sufficient, but if they have to pass each other, I should not advise its being less than three feet two by one foot eight.

 432. What

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432. What do you mean by merely sitting?—I mean that where persons sit without the necessity of others passing in front of them, with a little change in the backs so as to make room for the feet, that would give ample space for persons of the largest dimensions; two feet nine is the distance that the Church Commissioners prescribe in the churches. Upon an average, I think that one foot eight would be sufficient; but where gentlemen have a long sitting, and have to get up frequently to address the House, I should not recommend less than two feet in width, and from the back of one seat to the back of the other less than three feet two inches.

433. Taking those dimensions as the smallest you could advise for good accommodation, do you think that the present House can be altered so as to afford it?—I should not advise any such attempt to be made.

434. Then is it your opinion that a new building is necessary to afford accommodation?—An increase of area I should think absolutely necessary. I think sufficient accommodation cannot be afforded within the present walls; but I am quite prepared to advise, in the strongest possible manner, as the most expedient and best way to give the space required for the House of Commons, would be by taking down a portion of the present walls, and extending the building, by which means ample room would be obtained, less cost incurred, and less inconvenience, I believe, created.

435. What is the precise nature of the alteration you would recommend?—The taking down of the two side walls to the turret. The cheapest way to make the alteration would be to make an enlargement upon one side alone; but I do not think any person would recommend that to be done, because you would have to deposit the roof partly upon the new wall, and partly upon the old one, therefore I should advise that both the side walls should be taken down upon the north and the south.

436. And you would leave the east and the west walls of the present building?—Yes.

437. What are the length of the east and west walls that you would leave?—I would leave the length of the present Chapel, which is 61 feet.

438. What would you make the length of the walls upon the north and south?—The whole breadth necessary would be 66 feet, which would make the House nearly a square.

439. Would not that plan be nearly equivalent to clearing away the present House and building a new House upon it?—Certainly not; it would not be half the cost.

440. What would be the difference?—The calculation I have made of the expense of enlarging the present House of Commons in this manner would be 6,500*l.*, and as a security against any chance cost that might arise, I should wish to increase that estimate to 8,000*l.*, and that sum I am certain would be the extent of the cost.

441. Within what time could the enlargement be effected?—The small theatre in the Haymarket was six months in building; Drury Lane was 12 months, short seven days; and by building the outside walls first, I think the House might sit within the present House even during the progress of great part of the work; but, at all events, it would not take more than six months to complete the work.

442. Would you carry the outside wall from the foundation, or would you erect it upon any buildings now existing?—I would form a foundation, unquestionably; it would not be safe to build new walls partly upon a new and partly upon an old foundation. The roof itself might be kept on, and the new part of the roof be so formed as to support the present roof, and to make it as strong as a new roof; when you provided a new support you might take away the props put by Sir Christopher Wren. Another advantage would be, that the floor, Speaker's seat and the front seats would remain as they are, and the others would progressively recede. The present space between the seats being two feet nine inches, they would require an addition of five inches to each up to the present walls. The two side walls, the north and the south, would be taken down no lower than to the fifth seat from the floor. The additional seats would all be provided ready to be fixed. When the outer walls were completed you would merely have to take down the middle walls to the level of the fifth seat.

443. What sitting room do you calculate in the area of the house?—The size of the area required would depend upon whether the Committee thought fit to have the whole of the Members sitting in one slope from the floor, or whether they would admit of galleries; because, by the addition of galleries the walls may be

be nearer together, and diminish the space necessary for the accommodation of the Members without galleries.

444. What dimensions would be required, supposing there were no gallery?—It would require a space of 70 feet in width by 61 in length to seat 540 in the body of the House, and an area of 76 feet six inches by 61 to seat 600 without galleries.

445. Is a quadrangle the shape you would recommend as best suited to enable the Speaker to see every person in the House?—I would recommend, if possible, that the Speaker should have every Member in front of him: but there are two things to be considered; first, the Speaker seeing the Members, and secondly, the Members hearing each other. In a lecture-room, where one person is to address an assembly, an amphitheatre or semicircular form is the best; but where Members have to debate with each other, it seems to me that the quadrangular form is best suited to answer that object. There are a few Members behind the Speaker, unquestionably, and you might throw the Speaker's Chair farther back; but then perhaps he might find it difficult to distinguish the countenance of any Member that might address him at the extremity of the area, as the distance would be greater from him.

446. When you say circular, do you mean a complete round?—I should make it a complete round if I made it circular; but I am afraid the sound would not be audible when but few Members were present.

447. Will you state the reasons why you think it would be preferable to take the present site instead of a new site?—I would say, first, economy, and it keeps it more within the body of its present conveniences, such as they are; another point is this, that if it should ever fall into the notions of Parliament to give to the exterior of that building such a character as should be equal to the dignity of the country, it interferes less with anything that may be required to be done externally to form it into a complete noble building.

448. Wherein does the saving consist, because nothing will be left standing of the old building but part of the extreme east and west walls?—Two-thirds at least of the basement story, the Speaker's Dining-room and the walls attached to it, and the floor, except the new pieces; the ends are retained, the roof is preserved, and there are many other things connected with a new building which it would be difficult to explain.

449. Can you preserve the roof when you enlarge the diameter of the roof to the extent you have stated?—The present roof rests now upon the trusses, and I could form trusses that would hold the roof up, and support it completely upon the new walls; I should give the roof its new support before I took away the old one, and it would rather strengthen the new walls than weaken them.

450. The present length of the roof is 35 feet, and you would add another 35 feet; in doing that, at least half the expense of a new roof is incurred?—Certainly.

451. Would not there be considerably increased expense by making it a job in that way instead of having a completely new roof?—As a professional man, I would say that it would make a good job, and there would be as much strength necessary to support a new roof of such a span as would be required to support the present roof with the addition on each side.

452. Do you mean that the present roof would be left?—The top of it, and the cross-beams, called collar-beams.

453. How would the new part of the roof be made?—In the same manner as the present.

454. Would you raise the present roof?—It will not be at all necessary to raise the present roof, because there is so large a space now from the floor, which was made when Sir Christopher Wren put in his trusses to support the roof, as would give sufficient height for the House of Commons upon its enlarged dimensions.

455. How much lower would the new side walls be than the present walls?—About three feet.

456. Would the level of the new ceiling be higher than the present ceiling?—It will be about seven feet higher, or perhaps 10.

457. What number of strangers would you provide accommodation for?—I suppose the House would not object to having a Gallery for strangers.

458. Do you propose enlarging the Strangers' Gallery?—The Strangers' Gallery will necessarily be double its present length; it would be able to accommodate 156 strangers.

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459. How many of the 540 seats would be under the Strangers' Gallery?—About 100 seats, unless the Gallery exceeds what I think it ought.

460. Then that would leave sitting room in the body of the House for only 540 Members?—I should be sorry to recommend a House containing accommodation for 640 Members in the body of it without Galleries.

461. Would you propose a receding or a projecting Gallery?—A projecting Gallery, for the purpose of bringing the Members nearer together; and it appears to me desirable that the Reporters' and the Peers' Gallery should be at the back, and above the Speaker's chair, because I know how anxious the constituency are to know what their representatives are doing, and as the reporters are the channels of conveying that information, it appears to me desirable that they should have the best means afforded to them.

462. Would you propose to have it over the Speaker's head?—No, I would have a receding Gallery over what is called Solomon's Porch.

463. And where would you propose to have the Peers?—In the body of the House, behind the Speaker's chair. As there is ample room over the Lobby for the Strangers' Gallery to recede, I should recommend the Strangers' Gallery to recede from the body of the House.

464. Supposing it should be determined not to pull down the present House, have you directed your attention to the building of a new House, and if so, in what situation would you recommend it to be built?—I feel, with submission to the Committee, so very strong in my opinion as to the superiority, in every point of view, of the site of the present House of Commons, that I should be most reluctant to give any recommendation for building a new House.

465. How would you provide for the ventilation of the House?—My own opinion is, that the ventilation both of this and other large buildings, is very defective; it depends upon the valves at the top, which often bring in as much foul air as they carry out. It appears to me that the only right way to ventilate the House of Commons would be by the circulation of water. At times the air is so heated, and passes through so many lungs, that it becomes extremely foul. Now you can always secure a quick circulation of water, and if the House had pipes in various places, which would not be at all unsightly, with a small trough or reservoir to catch the deposit of the condensed foul air, I feel sure that by such a quick circulation of water they would always have a pure air.

466. Are you aware that by extending the walls 13 or 14 feet towards the Library, you would experience, from the height of the Library, a great impediment to the circulation of the air?—I feel certain that the circulation of air may be as good as you please. When you consider that air is thrown into the holds of ships and the bottoms of mines, I am certain that I could send a breeze of air through the House that would be satisfactory.

467. By enlarging the present House to the extent you have stated, and raising it to the height you have stated, would the power of ventilation be impeded?—I should say certainly not; I feel confident that I could give it as much ventilation as could be desired.

468. Are you prepared to offer any opinion with regard to the erection of any new House, or have you solely considered the alteration of the old one?—I am not prepared to give any opinion upon the erection of a new House, because I have formed a most decided opinion in favour of altering the present House; but before I came to that conclusion I did examine and consider the sites that seemed best calculated for a new House of Commons, and also the form and the probability of the present and future cost, as well as the arrangement of the required conveniences.

Martis, 23° die Aprilis, 1833.

JOSEPH HUME, ESQ., IN THE CHAIR.

Mr. *George Basevi*, jun. Architect, called in; and Examined.

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Plan 19.

469. HAVE you been put in possession of a ground-plan of the building of the House of Commons?—No, I have not, but I have taken a plan of the buildings.

470. Some questions have been submitted to you, and the object of the Committee is, whether, after the examination of the old House, and attending to the

questions which have been put to you, you consider that any alteration could be made in the old House to afford accommodation for 600 Members, with the dimensions of two feet for sittings, and three feet four from centre to centre of the seats, and admitting also 50 Peers, and some other persons, can you make any alterations in the old House which could effect that purpose?—I think it would be impossible to alter the old House so as to make it contain 600 Members and 50 Peers.

471. Could you by pulling down or widening in any way, add to the capaciy?—Yes; but I think it would be inexpedient to touch the present House.

472. On what ground do you think that it would be inexpedient?—To widen the present House materially, would be in other words to rebuild it on its present site; this, besides being an expensive plan, would deprive the Members of their House for a length of time.

473. You are aware that if you were to widen it as far as the Speaker's south cloister, and extend it on the other side as far as the Ingrossing Office, there would be plenty of room to contain the number of Members required?—Yes; there would be more width perhaps than would be absolutely necessary, but it would entirely destroy the present House.

474. Then you give up the idea that there is not sufficient space to widen the House, as stated to the Committee?—I stated that it was inexpedient to touch the present House, not that there was not space enough.

475. On what ground do you think that it would be inexpedient?—The length of time the Members would be deprived of their House, besides interfering with the Speaker's house, and causing a greater expense than if an unoccupied space were taken.

476–7. In what way would it interfere with the Speaker's house, and what rooms do you suppose you take away from the Speaker's house in making that alteration? It would take away the Speaker's private staircase.

478. What other rooms?—I am not aware of any other, except such as may be underneath the side; but I beg to observe that among questions sent to me for my consideration, one point is to provide a Lobby for 600 Members; and although the plan suggested for widening the House would afford the accommodation required within the House, it would not give the size necessary for the new Lobby.

479. Is there any way of increasing the Lobby, by which you can gain additional room to it?—The Lobby might be carried on to the extremity of the lower Lobby, without difficulty.

480. Then in that case there would be sufficient room?—I think not; and there would be a great deal of alteration required to effect that, on account of the difference of the levels.

481. Would there be width enough, upon the plan that has been suggested to you, for a corridor round the House on the outside?—Not without extending beyond the south wall of the Speaker's cloister; and notwithstanding the increased width thus obtained for the House, galleries would still be required to enable it to accommodate the number of 600 Members, and there would not be space enough for staircases to them.

482. You say that there would not be sufficient room for 600 Members in the Lobby, supposing the lower Lobby added to the present?—I think not.

483. How many Members do you suppose there would be room for?—If the two Lobbies were thrown into one, there would be room for about 400 persons.

484. The area of the Lobby would be pretty nearly doubled by this alteration?—About doubled.

485. If that were done, would it not be a strange irregular building after all?—Yes, I think it would; it is not what I can recommend.

486. You have attempted to consider the subject?—I have.

487. And you have come to the conclusion that it would be quite inexpedient to erect a new House on the site of the old one?—That is my opinion.

488. Are you, after examining the premises, prepared to recommend to the Committee a situation in which you would erect a House, and what kind of House would you recommend?—Yes. [*The Witness produced a model.*]

489. What situation would you recommend for a new House?—I beg to recommend the site of Mr. Ley's house and garden, for the following reasons: first, because it does not injure the buildings of the Speaker's house, or the salubrity of its situation; second, because it does not destroy the present House of Commons, or in fact any other building unnecessarily; and third, because it affords the easiest

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easiest mode of access to the House of Lords and Library of the House of Commons.

490. You would propose to remove Mr. Ley's house; would you remove also the houses that are on the south side of the present House?—I would propose to remove all of them.

491. That is, all between the Long Gallery, the Library, and the old House?—Yes.

492. Will you describe the kind of building which you propose to erect after removing Mr. Ley's house and all the offices south of the old House?—On the site of Mr. Ley's house, from the southern wall of the old House of Commons, to join the north wall of the Library, I place a Lobby, which communicates with the Library and with the old House of Commons, the distance between the two being about 60 feet, and the width of the new Lobby would be about 31 feet from west to east.

493. And east of that Lobby you place the proposed new House?—Yes.

494. What shape do you propose that House to be?—A parallelogram.

495. Will you state the reasons why you prefer that shape?—I consider the shape of the parallelogram will afford the greatest accommodation in the smallest superficial area, and I imagined it to be most in accordance with usages of the House itself.

496. What are the dimensions of the House that you would propose?—On the ground level 46 feet by 82; on the gallery level (for I propose a Gallery to project four feet on two sides into the house) 52 feet by the same length.

497. For how many do you propose accommodation in the body of the House?—Four hundred and forty-four.

498. You propose the Speaker to be placed not at the eastern extremity of the parallelogram, but somewhat advanced; would he be able to see all the Members of the House in the situation in which you place the chair?—He would be able to see all within about 25. A little elevated behind the Speaker I propose to place the Peers' seats, and behind their seats, on a higher level, I place the Strangers' Gallery.

499. What distance is there from the back seat of the Strangers' Gallery to the table before the Speaker?—Thirty-seven feet.

500. What would be the greatest distance from the Speaker's table to the western extremity of the House?—Sixty-three feet.

501. Do you propose the Gallery to run round the whole House?—No, only on two sides. It will be seen by the plan and model that, commencing from the eastern end, I make five rows of seats, forming a square and surrounding the floor; these occupy about 46 feet of the length; beyond these, towards the west, rise gradually eight other rows of seats, extending across the whole breadth of the House, the two uppermost being on the same level with the two gallery seats.

502. The Galleries admit of two seats, four feet projecting into the House, and three feet receding from the wall?—Yes.

503. The width of the Gallery would be seven feet, including the projecting into the House and the receding from it?—Yes.

504. The projecting part of the Gallery, then, only extends over two-thirds of the length of the House?—Over only two-thirds.

505. What is the distance between the extreme walls?—Eighty-two feet.

506. Are you aware what the distance is in the present House?—Sixty-one feet.

507. Then the increased distance would be 21 feet?—Yes.

508. Do you think a Member speaking at the upper end of the House would be heard by the Members at the opposite end, and by the strangers?—I imagine he would be as well heard as in any building of sufficient size to accommodate 600 persons.

509. Does your experience direct you, or do you draw your conclusion from any known buildings of similar dimensions where the sound has been tried?—I have examined several buildings of different forms, with a view of ascertaining the form in which the voice can be heard the greatest distance with distinctness. In the Ancient Concert-room, which is 104 feet long, 35 feet wide, and 33 feet high, the voice is distinctly heard at the furthest end, and musicians consider it the best room for sound. The form of the ceiling is a flat segment of a circle. There is no echo in the room; and in the directors' boxes, situated at the opposite end of the room to the orchestra, the music is heard better than at any other point.

510. What is the height of the vaulted part?—About eight feet.

511. Are

511. Are you able to judge from that what the effect would be of a person speaking from the opposite end to where the music is; would he be heard equally well with the music?—I think he would be equally well heard.

512. Do you think, speaking from the side, he would be heard?—I am not able to answer that question of that particular room.

513. Do you think it would be possible for any physical power, for any length of time, to sustain the voice at the pitch at which a singer generally sings at a public meeting?—I am unable to answer that question.

514. Will you mention any other building?—The Freemasons' Hall is about 88 feet long, 38 feet wide, and 37 feet high; the ceiling rises from the walls in a curved form for about nine feet, and the remainder is flat. In that room you hear perfectly well when the speaker is in front of the platform, particularly if he is a little elevated.

515. Have you considered the advantage that would be derived by having the House wider than in your plan, so that no Member should be at a greater distance from the Speaker than 45 or 50 feet?—My opinion is, with respect to hearing in buildings required to accommodate a large number of persons, that if square or nearly square, hearing would not be generally so good as in a room of reasonable width, with such a length as would be required to make both contain the same superficial area.

516. In whatever situation the speaker may stand?—Yes; supposing the whole room filled, a greater number would hear in an oblong than in a room nearly square.

517. Suppose the extreme width should be 35 feet, and in the other case it should be 50 feet, would you say, the extreme being in one case 35 feet, the persons would hear better in that shape than they would with a width of 50 feet?—In my opinion more persons would hear; but of course much depends upon the arrangement of the seats.

518. Supposing in your plan all the seats filled, by what number of feet would the most distant speakers be separated from each other?—Seventy-six feet.

519. How far from such speaker in the west end of the House would the back seat of the Strangers' Gallery be?—Ninety-four feet.

520. Do you not think that 94 feet is a great distance for any person to make himself heard?—I had imagined that persons desirous of speaking on any particular question would descend to the seats in the vicinity of the Speaker, and from those seats they would, in my opinion, be distinctly heard in the Strangers' Gallery; and I also think that at the extreme eastern end, a powerful voice would be distinctly heard in the Strangers' Gallery, and generally well heard throughout the House. In churches the pulpit is often at nearly as great a distance, and in the greater number an attentive listener can hear with distinctness.

521. Supposing a speaker speaking from the table, must he not either turn his back upon the reporters to be heard by the main body of Members, or if he wishes to be heard by the reporters, must he not turn his back upon the Members?—If he were to turn his back to the Strangers' Gallery, he would also turn his back to the Speaker; but turning his side towards the Speaker, as I have observed the practice to be in the House, he would be heard by those in the Strangers' Gallery, and by the majority of the Members.

522. Do you consider the present House well adapted to hearing?—No, I do not.

523. Is not that partly owing to the ceiling of the galleries?—I think it is.

524-5. Do you not think it is possible that the ceiling of the galleries could be made to act as a sound-board?—If the ceiling were levelled the sound would certainly be improved.

526. How many Members could sit in the square of the House before the rising of the western side?—About 270.

527. Do you include the side seats?—Yes, all the seats forming the square.

528. No person would then be at a greater distance from the Speaker in that square portion of the House than from 25 to 30 feet?—At the extreme diagonal points a Member would be 35 feet distant from the Speaker; but by this arrangement of the seats and corridor round the House, there would not be the continual passing to and fro at the bar of the House as at present.

529. How do you propose the Members getting to their seats?—The corridor that environs the House is entered from the new Lobby through a door in the centre, and from the corridor there are six side and one principal entrance into the

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lower part of the House, and six staircases conduct to the Galleries and upper seats at the east end.

530. How many persons will the Strangers' Gallery hold?—One hundred and fifty.

531. And how many Peers in the Gallery below that?—Fifty.

532. How high do you propose the seat for the Peers to be above the House?—A head of a Member, when standing, would be level with the top of the gallery front.

533. How do you go to those seats?—From the corridor.

534. How do you arrive at the Strangers' Gallery?—By Cotton-garden.

535. You have marked to the eastward two apartments; what are those?—They are for the Speaker, who would be so far removed by this plan from his present retiring room, that I thought it necessary to provide a new apartment for his use out of the space under the Strangers' Gallery.

536. What is the height of the ceiling from the floor of the House?—Thirty-six feet.

537. Do you propose it to be a dead level?—I propose the ceiling to rise off the walls in a curved form, and the rest to be flat.

538. What object have you in that?—Sound; it strikes me from observation that all angles are injurious to sound; the ceilings of concert rooms are generally curved as I propose.

539. What do you propose the walls to be?—Lined with wood.

540. What wood do you consider conveys sound best?—Deal.

541. Better than oak?—Yes.

542. Or plaster?—Yes.

543. Or cedar or mahogany?—I have not considered that; the lighter and more porous woods vibrate most readily to sound.

544. Would the painting of the wood affect the sound?—But in a trifling degree, if at all.

545. Do you propose the new House to be on a level with the old House, or what arrangement do you make as to that?—I propose the level of the new House to be the same as the Lobby of the old House.

546. Have you ascertained whether you can lower the old House to a level with the Lobby?—I have not; the difference of level is nine inches.

547. You must ascend nine inches, and then you descend nine inches?—Yes.

548. Then you would not think of altering the level of the old House?—No.

549. Do you propose that underneath this House the area should be applied for the use of buildings?—Yes.

550. Including the Lobby?—Yes.

551. Do you propose any building above the Lobby, which would be on the level with the floor of the House?—I propose an upper Lobby, and a room over that, the upper Lobby to communicate with the upper Library; and the room over, with the Committee-rooms over the Library.

552. Then you would have in that plan one large room above, and one large room below?—Yes, besides the Lobby of the House.

553. What is the reason that you prefer to put the new House of Commons on the same level as the Lobby of the old House?—I do not prefer it; I should prefer placing it on the same level as the House of Lords if the Lobby of the House of Lords might be taken for a direct entrance to both Houses from Old Palace-yard; but unless this can be done, to place the new House on the same level as the House of Lords would cause more steps up and down than now exist.

554. How do you propose to make the communication between the new House of Commons and the House of Lords?—Through a new Gallery on the south side of the present House.

555. You erect a Gallery south of the old House, and communicate thus with the new House?—Yes.

556. What are the dimensions of the new Gallery?—Seventy-four feet long by 14 wide.

557. You mean 74 feet from the west side of the new Lobby to the east side of the long Gallery?—Yes.

558. How do you propose to carry your communication with the House of Lords beyond that Gallery?—The Gallery being placed on the same level as the Lobby of the present House of Commons, I propose to continue the floor of the Lobby at its present level, as far as a line even with the south wall of the proposed new Gallery and south wall of the Lords' Lobby, and then to descend six steps, where

where you now ascend seven steps, to the level of the floor of the House of Lords.

559. Filling up all the intermediate steps where there is a descent from the Commons' Lobby into the House of Lords?—Yes; there would be then no other than the six steps between the new House of Commons and the House of Lords.

560. And that space for descent would be between the long Gallery and the House of Lords?—Yes.

561. How do you propose that Gallery or passage from the new Lobby to the Long Gallery to be lighted?—It is to be lighted from Cotton-garden.

562. How many feet would the roof of it be below the present windows in the south side of the old House; would it prevent perfect ventilation?—Above the floor of the Lobby it would be about 10 or 12 feet high, and would not interfere with the ventilation of the old House.

563. Do you propose to afford any other accommodation for any of the offices now connected and near the old House?—I propose to erect a new Vote Office at the entrance of the new Gallery on the south side, adjoining the Long Gallery.

564. What would you have underneath that?—I propose to have rooms underneath every part of the new buildings.

565. This plan of yours contemplates Peers and strangers to remain in their places during a division of the House?—Yes, it does.

566. Supposing it necessary to exclude both Peers and commoners on any division, where would you dispose of them?—There is a small Lobby at the back of the Strangers' Gallery, into which a great many might go, and the rest must descend the staircase; the Lobby is not large enough for the whole number; the Peers might go into the corridors.

566*. Would it not be very easy to make an arrangement, if thought necessary, for that purpose?—Yes.

567. Supposing a new House to be placed upon the same level with the House of Lords, do you think there would be height beneath the House for those offices which you have described?—Yes, there would be at least 14 feet.

568. And that would enable you to raise the lower apartments two feet from the floor?—Yes.

569. And that would put those rooms beyond the reach of water?—Yes.

570. Would not the ventilation of the Library be a good deal impeded by this plan?—No; the west wall of the new Lobby is exactly in the place of the west wall of Mr. Ley's house.

571. What are the advantages which you conceive belong to a building placed intermediately between the Library and the old House, in preference to having it directly east of the old House, and making the old House and Lobby directly flush into the new House.

572. The latter plan would darken the present House of Commons, and it would spoil the Speaker's dining-room, and injure his house as a residence, cause additional expense, and not facilitate the communication with the House of Lords.

573. Could not you give light to the Speaker's dining-room from Cotton-garden?—Yes.

574. Have you considered, if buildings for additional Committee-rooms were wanted, so as to bring them close to the House, in what situation you could place any buildings for that purpose?—I have not considered that subject; I have confined my attention to the best site for a new House, and have placed it among those buildings that are in a substantial state of repair, and which I conceived would never be removed.

575. Have you ever considered the possibility of removing the House to a different part of the town altogether?—No, I have not.

576. The Committee have pointed out to you the objection which appears to them in placing so many Members at a distance of 50 or 60 feet from the chair; can you recommend to the Committee any other shape in which that inconvenience might be avoided, as it is desirable to have the Members as equally distant as possible from the Speaker?—I have tried several other forms for a House, viz. the oval, semicircle, and the octagon; the oval form offers the greatest accommodation of the three, but none of them will accommodate an equal number of persons with a parallelogram, supposing the area to be the same in each figure, nor bring a greater number of Members nearer to the Speaker. [*The Witness produced a plan of the oval and octagonal shapes.*]

577. Do you mean with and without a Gallery?—Yes; for example, an oval of the size of my House, 82 feet by 46, will hold only 380 persons without galleries; and

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and even with two rows of seats in galleries projecting their whole depth into the House it will only accommodate 506 persons, and not allow space for Peers' seats, as my parallelogram does with those dimensions.

578. Where would you propose the Speaker to be in the oval?—In the centre of the diameter line.

579. What is your opinion of the dimensions pointed out to you, of two feet and three feet four?—I think, that if only 600 Members are to be accommodated, the dimensions are too great.

580. What would you consider should be the distance between the centre and the back of each bench?—I think three feet four is a very good distance from front to back of seats, but that 20 inches on an average would be sufficient width.

581. Are you aware that soldiers standing in line are supposed each to occupy 20 inches?—No, I am not.

582. If the dimensions were to be reduced, of how much would that be a saving?—Of one-sixth.

583. That oval would then be of sufficient size to contain the Members at the reduced scale?—That oval is 82 by 46, and will contain, with two rows of seats in galleries, 506 persons, at two feet each, which would be about equal to 600 at 20 inches.

584. What is your opinion as to the space altogether to be allotted, would it be more than would be required?—In my opinion it would; a House of a size to contain sittings at 20 inches each for 600 Members would be quite large enough; for as 600 Members are seldom together in the House, each person would, on the average, have at least two feet sitting, and the advantage would be obtained of hearing better in consequence of the diminished size of the House.

585. Would not it answer better to reduce the length of your plan for the House by 10 feet, and add five feet or six feet to the width, so as to bring the Members nearer to the Speaker?—My plan is 46 feet wide below and 52 feet wide above: this is a wide dimension, and I should have preferred to have made it rather narrower, but could not without falling into the opposite inconvenience of excessive length.

586. What is your opinion of a semicircle, with reference to hearing and seeing; do you not think it most convenient for hearing and seeing?—If the Members were to speak from a tribune, as in the Chamber of Deputies in Paris, there is no doubt the semicircular shape would be best; but speaking from all parts of the House, I fear the speaker would be but very imperfectly heard. The courts at Gloucester are of that shape, and it is very difficult to hear in them; the Judge can hear, sitting in the centre of the circle, but in the magistrates' seats, at his side, you have difficulty in hearing, and persons on the circular seats behind the counsel cannot hear.

587. What elevation do you give to your seats?—I commence at one foot, and gradually increase the elevation.

588. You rise from 12 to 21 inches?—Yes.

589. Does not the hearing in the different points depend much upon the voice ascending or descending, and is it not desirable to have as many speakers on the same level as possible; and is not your plan, where a very considerable portion are raised above the others, objectionable?—A large portion must be raised above the others in any plan; and my impression is, that speaking from the higher seats in my plan, a powerful voice would be heard nearly as well as from any other point, and I draw that conclusion from the Ancient Concert-room in Hanover-square, and various churches.

590. With regard to the side walls, you have made a corridor going all round, and the gallery projecting into the House; do you not think it possible, with a view of increasing the breadth of the House, that you might do away with the corridor, so that there should be other seats in the House; do you think that would interfere with the hearing?—Yes.

591. You are not afraid of the distance or elevation being against the hearing generally?—No, not according to the arrangement I have made.

592. Do you not think the semicircular shape brings all the Members within the eye of the Speaker better than any other shape?—It brings all the Members within the eye of the Speaker, certainly, better than any other figure, but by my plan there will not be many seats out of the Speaker's sight.

593. What is the extreme distance at which any of the Members would be from the Speaker?—In a semicircular House to contain 600 Members, including a Gallery, there would be one line of 50 feet.

594. Then the Members speaking at the extreme sides would be 100 feet from each other?—Yes.

595. Then your deliberate opinion is, that the parallelogram such as you have produced, would be, taking everything into consideration, the most convenient shape?—That is my opinion.

596. Are you able to give the Committee an estimate of what the expense of the whole building would be, including the Lobby?—The estimate which I have made for the whole is 36,000 *l.*

597. Making the communication with the walls and all the necessary alterations?—Yes, the whole fitting up of the rooms below, according to my own view of the case.

598. In what way do you propose to fit up the House of Commons?—In the same style as the present, with the same description of seats and panelling.

599. Have you considered the expense that might attend the foundation?—Yes, I have; I have considered that the foundation would cost, above the ordinary expense of foundation, 4,000 *l.*

600. Are you aware what depth you would have to go before you came to the foundation?—No.

601. Would it be necessary to pile?—No, I should not pile.

602. Do you know to what depth they have been obliged to go for the foundation of Lambeth Palace, on the opposite side of the water?—No; but my impression is that it would be about 14 feet.

603. Does your estimate include the wood fittings, as well as the masonry, and making every thing complete?—Yes.

604. How do you propose to ventilate the House?—From many apertures of equal size distributed throughout the ceiling; not as in the present House, where there is one large ventilator in the centre, and four smaller ones at the sides, as the great draft through them carries off a great portion of the sound.

605. What kind of a roof do you propose?—The triangular form of roof.

606. Have you considered the possibility of warming the House by keeping the air in the corridor at a proper temperature, and whether that could be done by hot water or any other means?—I should propose to maintain at a little above temperate heat, the air of the corridors, Lobby, and external passages of the House, but this alone would not be sufficient to warm the body of the House.

607. What other means would you adopt for that purpose?—I would suggest to have fire-places in the body of the House; nothing assists ventilation so much as open fire-places.

608. Have you ever heard of a mode of ventilating by placing lamps in such a manner as to occasion draft; and what is your opinion of that plan?—Yes; but my objection to that plan would be, that by causing a strong current to one large opening, as in the present House of Commons, a great portion of the sound would be carried away through it.

609. Would there be any objection to warming the House with warm-water pipes?—Not at all, provided there were also open fire-places.

610. Or to cooling with cold-water pipes?—No.

611. Do you not think that by having fire-places in the corridor, they could be made to serve the purpose for which you propose fire-places in the House?—No; I would have fires in the corridor also, and some advantage might be gained no doubt from them.

612. Would a fire-place at each end of the House answer the extent of ventilation that you anticipate?—Four common fire-places would: any gentleman that has lived in a room heated by hot air or water, would have found how exceedingly oppressive it is; and there is not in those modes of warming any vent for the impurities that do not rise, but remain in the lower part of a room; these, open fire-places assist to carry off.

613. Do you think that the Committee might calculate that the outside of all the expense would be 36,000 *l.*?—Yes.

614. How long, in order to do justice to the work and to the architect, would it require to finish a building of that kind?—Two years.

615. Could any arrangement, with safety to the work, be come to by which it could be done in a year?—Yes, it might be done in a year without any material injury, but a greater expense would be incurred.

616. The Committee understand that you contemplate leaving the present House as it is, until the other building should be entirely ready?—Yes.

 617. How

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617. How do you intend to face the building?—I propose to use granite up to a certain height, and Bath-stone all above that height.

618. Supposing the buildings were faced with bricks, what difference would that make in the expense?—I must have time to consider that question.

619. Five thousand pounds?—Not so much; many portions must be of stone, even supposing the plain parts were of brick.

Mercurii, 24° die Aprilis, 1833.

JOSEPH HUME, ESQ., IN THE CHAIR.

Mr. *John Deering*, Architect, called in; and Examined.

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Plan 7.

620. HAVE you considered the possibility of altering the present House of Commons, so as to afford the accommodation pointed out in the questions submitted to you?—It does not appear to me to be possible to alter the present House so as to afford that accommodation, which requires increased Lobby room, as well as increased space in the House for 600 Members. The superficial content or area does not seem to admit of such alteration, except by the introduction of extensive galleries, which I should consider most objectionable, both as to ventilation and sound.

621. Does your mind incline to another building independent of the present?—Yes, with as little gallery as possible.

622. Do you think that a gallery differently constructed from the present might be made as a sounding-board?—I think not: a gallery must rather impede than assist the sound, and it would be also objectionable with reference to ventilation. We know any one speaking under a sounding-board is better heard, but this question relates to those who are to hear as well as to those who are to speak.

623. On the whole your opinion is against a gallery?—Yes; because the air being in a different state under the gallery, the conveyance of the sound through it would be very different from the more open parts of the room.

624. After fully considering the subject, are you decidedly of opinion that it is a better plan to erect a new building for the accommodation of the Members than to alter the old one?—Decidedly.

625. Have you considered a situation for a new House?—Yes. Although the questions propounded by the Committee do not contemplate the absolute identity of the new with the old House, I venture to presume that it will still be desirable that the House of Commons may be said to meet in the ancient chapel of St. Stephen: I should propose, therefore, in the first instance, to remove Mr. Ley's house, together with all those buildings of a temporary nature which at present lean against and encumber the buttresses of the ancient chapel; and I would restore that chapel in every respect to its ancient character. I would next prolong the same towards the east, by removing the wall at that end, and adopting the form by which the ancient Basilica first assumed an enlarged character, that is, by widening the area, when clear of the ancient building, to 60 feet every way, and assimilating the general plan to that of St. Peter's at Rome. (It may appear irrelevant to speak of a cathedral, but I allude merely to its plan, and because that plan was originally somewhat like this chapel, until enlarged by throwing out a body in the mode I would propose in this instance.) I would make this the body of the House, throwing out a short arm, north and south, each of nine feet, and a deeper but unencumbered recess, in the manner of a lofty oriel window, behind the Speakers' Chair, placing the Speaker's Chair to the east, in its present relative position. These arms would be comparatively shallow recesses only, or galleries on each side the House, as seen on entering, or from the Speaker's Chair. Under them I would propose a passage or corridor, continued from the Lobby of the House of Lords all round the new House, and returning into Westminster Hall, which passage would be the great artery of communication between the House of Commons and its various dependencies.

626. That is surrounding the present old House as well as the new House with a gallery?—Yes.

627. What

627. What height would you cover it all round?—Not being professionally employed, I have not gone into points of detail. Mr. *John Deering.*

628. You are not aware, perhaps, that taking it up to the point mentioned, the south wall of the Speaker's Cloister and the Ingrossing Office, that the space is as large as the space you contemplate?—Yes, I am; but I beg to remark that the ancient building of the House of Commons now consists of a series of columns or buttresses, and nothing else, and the identity of St. Stephen's is, beyond them, a mere idea; all that remains is a series of buttresses, with some fragments between them: if you remove those buttresses you remove the chapel, and that which you build up, though it may partly occupy the site, will not be the ancient chapel of St. Stephen. And with reference to those buttresses, nothing can be more obvious to any architect inspecting the plan, than that they have undergone paring and cutting and piercing in every direction, so that it is very questionable whether, in removing those parts which now appear to be the clothing, that clothing may not be found to constitute the great support of the pillar itself. 24 April 1833.

629. Do you mean that your corridor or passage, being on a level with the House of Lords, should be three feet and a half below the present House?—There is no doubt but that the floor of the present House may be lowered; but the final adjustment of the levels, and the precise level most convenient for the new House, assuming the adoption of this or any other plan, must necessarily become a point for mature consideration after the plan has been fixed upon. The floor itself upon which the table stands, would be a very small space, and it might not, upon such consideration, be deemed inadvisable to descend two or even three steps to it, which would very much approximate the levels in question. I have been given to understand that the seats are desired to be three feet four from the centre of one bench to the centre of another; but I cannot but think that three feet four would be found practically so inconvenient, that though I have put the three first seats at that distance, I have disposed the others at a less interval; and between the first three and the last four I have supposed a wider space of five feet, for passing round; I have made the others two feet ten inches.

630. Do you mean that there should be a circular passage there?—I mean that the fourth row should be five feet wide, to facilitate the approach to the back seats, which I would intersect more frequently with intervals of access; though, perhaps, this space or diazoma would be better at the back of the last seat, immediately under the gallery. The spaces between each of the restored buttresses of the present chapel to be filled with Gothic tracery, in the manner of those at King's Chapel, Cambridge, except that the spaces which are there auditories, would here become small areas for the admission of light and air to the crypt, or Speaker's Dining-room, and the proposed long corridor. The general area thus formed as the enlarged St. Stephen's Chapel, I would divide into the portion used for the sittings of the House, and that to be appropriated to the uses of a Lobby, including one bay only of the old House in the new one.

631. What do you mean by one bay?—One buttress. With more immediate reference to the questions propounded by the Committee, I would thus put the new House due east of the old, because I think the approach and general effect would be more dignified than in any other mode of arrangement, while all the ancient recollections of the place would be preserved and strengthened. I prefer an octagonal, or rather square with the corners taken off, because I consider it essential that the House should be as small as possible, consistently with the required improvements. A larger House than 60 feet across, and containing about 3,000 square feet, the present being 1,650 only, that is, giving nearly twice the area, must be inconvenient, for admitting that feeble voices could not be heard at all, those whose sense of hearing may not be very acute, or who could only hear by means of that attention which in myself I find, when continued, painful, would naturally fall into conversation, and increase the difficulty to others. I prefer also a rounded or compact form, because the focus of attention, that is the Member addressing the House, being an ever-varying object, renders most others less eligible, perhaps least so that of the ancient theatre, where the seats, arranged in concentric semicircles, were the best adapted possible to a fixed scene, and was probably originally suggested by the form which the multitude spontaneously assumed, when seated to view the performances exhibited upon the cart of Thespis. No one would place himself behind that cart, and we may thus account for that original perfection of plan, from which the ancient theatre never departed. The ancient stadium or circus being a parallelogram with rounded ends, or the oval of the amphitheatre wherein the objects were constantly

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constantly varying, would suggest themselves, and the station of the Emperor on the long side be that of the Speaker; but I do not think they would be found practically convenient in the present instance. The recesses right and left in the plan I submit, would be a species of gallery; but as I put no Member, and only the passage under them, they would not advance but retire, for I think the sound would be affected more or less by a projecting gallery, as well as the equally warming and ventilation. I would introduce this as a place principally to be occupied on crowded occasions, and where Members would not require so much sitting room as three feet four by two feet.

632. What do you allow in the gallery?—I have thought that the ordinary church sitting room would be sufficient, 20 inches sitting, or even 18 inches.

633. Then in width?—Three feet; and you will recollect that the pew is a fixed inclosure, now in open seats you have a space to put out your feet under the seat before you.

634. In a church the object is to allow room to persons to kneel upon the hassocks, here it is an object to let the Members pass each other?—Yes, so I understand. It is not for me to question any point the Committee may have decided upon; but I cannot help thinking that the facility of passing every body at all times would be found practically objectionable; at all events, I am satisfied that three feet four by two feet would be found inconveniently ample; and with respect to the space of two feet, surely the space now occupied by the gentlemen around this table, who have arranged themselves in chairs at their pleasure, cannot be called otherwise than convenient sitting room to calculate upon: [*this being measured, was found to be 22 inches.*] But much must depend upon the rise of the floor, as three feet four with a step between each seat of fifteen inches, would be a very different dimension to that with a three-inch step.

635. What are the dimensions of this building you think would be capable of containing 600 Members?—It is 60 by 60 in the body, but then as there are branching recesses, it would perhaps contain 4,000 superficial feet of area at its greatest expanse.

636. What would be the contents of the body of the House?—Sixty by sixty, exclusive of the space behind the Speaker's Chair, and which I appropriate to the Speaker and Peers.

637. How many would the seats rising from the floor accommodate?—I would not wish to fix upon the precise number I would put below; the whole House would contain the 600 Members required.

638. Do you mean the whole House and the galleries included?—The House and two small galleries.

639. How far would the galleries project?—They would wholly recede.

640. How many seats would you have in it?—Three rows of seats.

641. How many do you calculate the gallery to contain, to leave room for the rest below?—The two galleries would contain from a fourth to a third of the whole.

642. What rise do you consider best calculated from the floor, both for seeing and hearing; what rise at each step?—All the steps should not rise equally.

643. Proceeding from the centre, which we call the floor, where the Speaker sits, what do you think the rise should be?—I have not myself considered that subject, because the Members who are practically acquainted with the conveniences and inconveniences of the present House, would be best able to decide upon the point of the rise of the seats, as well as all others relative to ingress and egress, and matters of practical detail.

644. How high would the back seat, with your view, of 60 feet diameter, be from the floor of the House, and what height above that would you put the gallery?—Those are subjects it would be affectation in me to speak off hand upon; it would imply a pretence to an intuitive knowledge of that which must always be the subject of matured consideration, in each particular instance, with those who may be appointed to assist the architect with their practical knowledge in the ultimate arrangement of such points of detail.

645. What rise do you think would be requisite from the centre for the highest seat; what would be the total rise for the seven or eight seats?—I should be very much disposed to think that the height given to the four seats in the presen House would be sufficient for the whole of the seven in the new one.

646. Taking the plan before us, what would be the greatest distance of any Member from the Speaker?—Seventy feet.

647. What would be the greatest distance of any one Member speaking from another Member?—The same distance, or 15 feet more than in the present House, would be the distance of any Member from the Speaker, as also of any one Member from another. The distance from the Speaker might be lessened by advancing the position of the Speaker's Chair; but I have supposed it essential that all the Members should be before the Speaker.

648. Do you consider the dimension you give of 60 feet square the best dimension for hearing?—I think it would be so, because the Members would be more together than in a more prolonged form.

649. Including the gallery?—The recesses are in addition to it.

650. Have you considered whether a parallelogram, with the ends round, or an amphitheatre, or a semicircle, would have advantages over your plan, with regard to Members speaking to each other, and with regard to hearing?—I presume that the idea of a semicircle has reference to the form of the ancient theatre, where it is found you can hear with best effect, as I have myself experienced in a theatre of 300 feet across; but then the experiment has been made at night, and in solitude, and there has been no roof: for I consider the great impediment to the distinct perception of sound is the reverberation of sounds previously proffered.

651. You were employed in planning the theatres at the London University?—I was.

652. What are the dimensions of that building?—About 65 or 66 feet across, a radius of 33 feet.

653. Have you attended to ascertain how the sound passes there from persons speaking from different parts of the building?—I am inclined to think that the rise of the seats is there too high.

654. How have you found the voice, because there they speak at the public meetings as they do in the House of Commons?—My sense of hearing is by no means acute; it is very dull; and I think where I can hear, anybody else ought to do so; I have certainly some difficulty there, or rather discomfort. On the upper seats I find a natural desire to sink more to the level of the speaker; if I am ever placed much above the speaker, I do not hear so well; I speak of that particular room, because in Exeter Hall I can hear every word up in the roof as distinctly as I can below; that is a room of very wide dimensions, approaching the square.

655. And the seats rise very little?—Yes.

656. But the speaker is placed generally high?—He was; but lately the platform has been, as an experiment, lowered 10 inches; it is now four feet four high, and I think to good effect.

657. Have you heard any speakers from the body of the Hall in different places to enable you to judge how they would be heard all over the room?—I think they are heard as well as from the platform, from the experiments made: but these have been when the room has been empty; there is a great difference between a room empty and full.

658. Has there been any echo at all in Exeter Hall?—Yes, but I consider echo has a great deal to do with the newness of the structure; I consider a new building to be in a very different state from an old one. In the house I inhabit, which was built by myself, though I am sitting in a room 45 feet from the street, a carriage going along the street shakes the clock on my chimney-piece. If a house could be like a China jar, of one piece, it would be perfection as a structure; but the least touch upon any part would be felt throughout the whole; the sort of vibration in question would, I take it, only serve to show that the mortar is good and the bricks sound; the perfection of a brick is to ring.

659. Should a building, in order to prevent echo, be lined, or have bare walls?—With regard to such degree of echo, and which does not exist when the room is at all full, I should think time would be a remedy generally; an echo is best prevented by drapery.

660. You are aware there was considerable echo in the theatre of the London University; does that continue still?—I do not know; I find that in such inquiries I can only trust the evidence of my own senses; all the books quote the theatre of Bordeaux as a model with regard to hearing; I have been told by persons who have been in it, that nothing can be worse; and we find the foundation of its good character to have been, that its history was published by its projector. Under similar auspices the published account of the Derby Infirmary presents it as a model of ventilation; so much so, that I was tempted to visit Derby for the purpose of inspecting its merits; but I found the resident very far from concurring in its eulogy;

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eulogy; there was no part he did not take exception to, and when I asked if there was not an unpleasant scent perceptible on entering the building, he asked me how it could be otherwise, when the system of ventilation required that no air should be allowed to escape in that entrance.

661. What are your opinions respecting circular buildings?—I believe in all instances the circle is found to produce a greater degree of echo than other forms.

662. Have you considered the shape of an elliptic with a piece added to it?—The difficulty in all instances is, that in your House you have a varying focus of attention, and a fixed focus; I mean by the latter, the Speaker or president, which almost seems to impose the circular form, or as nearly circular as possible.

663. Your plan is made upon that principle?—Yes, it is a square, cutting off the corners.

664. Which you think is the best?—Yes.

665. Have you considered what such a building could be erected for, including the area under the House?—The building alone about 18,000 *l.*, is what I have supposed.

666. Do you mean to fit it up with wood linings inside?—Yes.

667. Including the offices below?—Yes.

668. What wood should you prefer?—Wainscot; I believe the musical-instrument makers use deal for resonance; but you do not want that.

669. Does that include the whole expense, seating and every thing?—Yes, of the House; I am forming my idea upon Exeter Hall, which cost 28,000 *l.*, including every thing, and this is supposed to be only half the size.

670. Do you include in that the lower part?—Yes; Exeter Hall has three stories under the great room.

671. What are the outside dimensions of Exeter Hall?—One hundred and thirty-five feet by 82, with an additional piece, 24 feet wide by 80 feet long.

672. Under the great room how many floors are there?—Two floors and a floor of cellars, which, being intended to let as wine vaults, may have cost something like half the expense of another completed floor.

673. How is Exeter Hall lighted?—By side windows.

674. Was it built by contract?—No, by agreed prices, good prices, so that the work might be done in the best possible manner.

675. Was the building completed, with the exception of the vaults, for 28,000 *l.*?—Yes. I would rather say, including the architect's per-centage and other expenses, it was built for less than 30,000.

676. Did you face this with stone?—We had no stone exterior, except towards the Strand about 50 feet of face; there would be about four times as much stone here. When I speak of the expense of 30,000 *l.*, that includes the fitting up of the great room with seats of American oak, as well as gas-pipes supply and chandeliers.

677. Would you consider the fitting up of the House of Commons in seats in that way as included within the 18,000 *l.*?—Yes.

678. But not including the outer facing of stone?—No.

679. Can you say what addition that would make to the expense?—I should say about 4,000 *l.*

680. Have you considered the kind of foundation which you might be obliged to expend something more upon?—The modern system of treating foundations is very different from the old; it makes an artificial where no natural stratum is found. In London building, if we come to a stratum of gravel, it is not inquired whether that stratum be 6 or 60 feet thick, but certainly 6 feet would justify proceeding upon. Now, an artificial stratum of gravel grouted with good lime would be deemed quite as good as any natural bed of the same thickness.

681. Are you aware that the foundation of this is river silth, and that the new mode would not answer?—I was not aware of that; but I think you may take it for granted, pretty generally, where you find an ancient cathedral, the ground selected has not been so bad. The architect of this building, when he selected this site, must have had the whole neighbourhood or island at his disposal.

682. In addition to this 18,000 *l.*, what kind of architecture do you propose this to be?—I should say, stuccoed for 18,000 *l.*

683. Have you put down upon this plan, in addition to the galleries to run round the two buildings, one to run from the present Library to the old House?—It is with reference to one of the latter questions of the Committee, as to the communication

communication between the Library and the House, that I have planned that additional Library, which would conduct the Member at once from the House into the Library.

684. And might be employed for committee-rooms?—Yes, the space over it might be so.

685. What would be the additional expense of all those buildings?—I should suppose that the ancient chapel might cost to restore about 4,000*l.*, for the offices I have added 5,000*l.*, so as to make up 28,000*l.*

686. How many committee-rooms would that give?—I have not calculated.

687. The Peers you propose to be behind the Speaker?—Yes.

688. Where do you propose to put the strangers?—In their present relative position, because they would not have to cross the House to arrive at their position, and I should turn them out into those two spaces under their gallery on divisions; then I should put the reporters on the short side of the octagon, they would have there a box to themselves.

689. Would they hear the speakers from the further corners?—I presume so.

690. Would you have any gallery over where the Speaker is?—No.

691. How many strangers do you admit?—One hundred and fifty.

692. What space do you give them?—Inasmuch as their gallery is taken out of the old chapel, I can give them any space you please.

693. You take the Strangers' Gallery out of the eastern end, over Solomon's Porch?—Yes.

694. Have you considered that this building would interfere with the crypt below where the Dining-room is?—That is necessarily taken from the Speaker to effect the operation of the project; the plan is to take away that side up to the Cloister-wall, and the Dining-room would be lighted by means of the spaces between the buttresses. I have been given to understand that the Dining-room is only used on the occasion of great and night dinners, and it would be as well if it were lighted in the way pointed out upon the plan.

695. How would you ventilate the building, in order to have an equable temperature?—The whole art of ventilation has been lately much improved by the introduction of pipes of hot-water, which creates a circulation of the atmospheric medium in a manner difficult to be accomplished by any other means; few people who have been taken into a large room for the first time, to be told that the thermometer stood in all parts of it at the same degree of temperature by means of a vessel full of hot water in one corner of it, would believe till they had witnessed the fact. No mode of throwing heated and cold air into an apartment would answer the same purpose.

696. You would regulate the temperature by water pipes, hot and cold?—I would.

697. Then with regard to the air?—The hot water system effects that object also by putting in motion the atmospheric medium.

698. How would the foul air be prevented accumulating?—By being conveyed away in the roof of the building. It would naturally arise to that part, and might be effectively conveyed thence, as at Exeter Hall; at all events, I have no doubt that warming and ventilation might be accomplished by the introduction of warm water tubes.

699. Would you consider a fire necessary in the building, in order to secure proper ventilation?—I should think not, except to heat the water.

700. It should be underneath the House?—Yes.

701. You have no doubt whatever that ventilation and an equality of temperature would be best maintained by water pipes?—None whatever, and the heat produced is never oppressive, nor is the quality of the air changed as in the ordinary fire stove.

702. How long do you think it would be necessary before you could occupy this new building?—The time it would take erecting; if you erect it very rapidly, it would cost more money; it ought to take two years.

703. You mean two years actually to erect the building?—Yes; but you could get into it sooner.

704. Would it be possible to carry on this building without so much noise as would effectually interrupt the early sittings of the House in the old chapel of St. Stephen?—No; but the great portion of that which would be accompanied by noise might be done between session and session.

 705. Could

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705. Could you so arrange it as to do all the noisy part during the interval of the sessions, without impeding the building?—Yes, I think so.

706. If money was not an object, you could run it up between session and session?—Yes, I should think so; but you could not run up a stone building so rapidly.

707. Would it be possible to erect a firm and substantial building in so short a time?—Without difference as to its firmness.

708. What difference would it make in the expense?—It would add five or ten per cent.

709. Have you turned your attention exclusively to the site stated in your plan, or has it ever occurred to you it might be possible and feasible to remove the House of Commons altogether to a different part of the town?—It would certainly be practicable to build it on another site, and I think it would be possible to select a site more eligible.

710. Do you think the site of the old Palace at St. James's more eligible?—More centrical for the attendance of the Members, and being backed by the Park, it would afford a means of access to the Members that the populace could not interfere with, a private means of access, and if it were necessary to call in military aid at any time, it could be brought to bear with expedition and effect.

711. Has it not an advantage over the present situation, where, by blocking up Parliament-street, the access to the House would be nearly stopped, whereas if it was at the bottom of St. James's-street, there would be an access on that side, and also from the Park?—Yes, certainly; and also it would be open to His Majesty's uninterrupted access from the Park.

712. Do you think it would be practicable to convert the present Houses of Lords and Commons and the committee-rooms into public offices, without going to any great expense?—Generally speaking, when any public office requires enlargement, they take the house next door and they find it fits, therefore there is no difficulty in appropriating any particular house to that purpose.

713. These places could be so appropriated?—No doubt.

714. Are the soil and foundations about St. James's better than they are about here?—I have built a house upon Carlton-terrace, and the foundation was good.

715. Would a foundation be obtained there at less expense than a foundation here?—I do not apprehend that the foundation here would be so expensive as is supposed.

716. If it were necessary to remove any of the old buildings in St. James's, would not the old materials tend to diminish the expense?—Not very materially.

717. Are you able to state any opinion as to the probable value of the large house in Pall Mall, now occupied by the Ordnance Department?—It would be very difficult for me to do that without more consideration; I can only compare it with other houses of a similar description, of which I have learnt the prices in the neighbourhood. I think it would be converted with greater effect into three or four houses, because frontage is valuable there. I do not think it requires a beautiful building for a public office. I have been accessary to the spending some millions of the public money, as attached to a public department, and certainly the issue or effect of our fiats were not much influenced by the undignified character of the office from which they went forth.

718. Do you see any difficulty in converting the buildings here into public offices?—No, I do not.

719. Although not having considered the subject sufficiently to state precisely the sum you think it would be worth, are you able to state what, in round numbers, the house and grounds now occupied by the building in Pall Mall, where the Ordnance Office is, would be worth to let?—About 3,000 *l.* a year.

Mr. *George Allen.*

Mr. *George Allen,* Architect, called in; and Examined.

Plan 21.

720. HAVE you been furnished with a ground plan of the site of this House and the buildings about it?—Yes, I have.

721. Were you furnished also with some eight or nine questions?—I was.

722. Have you examined the old House, and are you able to state whether any alteration could be made in that House, to afford accommodation for the present number of Members?—I have looked at it with that view, and my impression is, that the old House could not be effectively altered for that purpose.

723. Have you considered the possibility of extending the northern and southern walls, so as to give a square of 65 feet nearly?—Yes, I have, by taking away the middle piers.

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724. Have the goodness to look at the Speaker's Cloister, and carry your eye from the south wall of the Speaker's House and Cloister on the one side, to the Ingrossing Office on the other. Did you ever contemplate that space as being applicable to the making of a new House of Commons?—Not as regards a total destruction of the present House; but, if the question means, by preserving as much of the old House as may be, I have; that is to say, by taking down portions, and extending it.

725. Having that in view, and seeing the dimensions, are you prepared to say there would not be sufficient room obtained by taking those walls down, and extending them as we have proposed, for all that is required?—I apprehend not, because the House would not require a mere lateral extension only, but also to be extended further towards the river, or you would have no Lobby left, if lengthened in a westerly direction.

726. Confine yourself at present to the House of Commons, without alluding to the Lobby?—I still think the shape so obtained would be inconvenient, from the width being then so much greater than the length.

727. The question simply regards the convenience, without any regard to the shape; whether the area is sufficiently large?—If you contemplate taking down the whole of the present House, and building a new House on the same site, room would then be afforded; but I do not conceive that the present House can be conveniently altered in the way pointed out.

728. What, on the whole, are you prepared to recommend as best to be done?—I should prefer a House being erected as nearly as may be on the same site; but that the whole should be brought more forward towards the river.

729. Supposing you were of opinion that the widening of the House would not be objectionable, but that it would be the best form in which the House could be built, you would then keep to the present site?—Yes, I should prefer it, and also extending it to the eastward.

730. You have not considered it proper to propose those alterations of the old House?—No, for having contemplated only a partial alteration of the present House, I found it utterly impossible to satisfy my judgment by such alteration; and that being the case, I considered it better to retain the present House as a Lobby, and to erect a new House beyond it.

731. But, supposing a Lobby to be found elsewhere, you consider the present site most desirable?—Yes, because the new House would otherwise, perhaps, be protruded too far towards the river, by which it becomes too remote from the present committee-rooms.

732. What committee-rooms do you allude to?—The general range of committee-rooms in Old Palace-yard.

733. You have not considered the forming a new range of committee-rooms?—Yes, I have.

734. As you have considered the whole purposes contemplated, and have considered where you would erect the new House, will you state the site you have selected?—Having considered it desirable to preserve the old House, I have sought for a new site for a new House.

735. Keeping that in view, where would you propose erecting it?—[*The Witness produced a plan, marked* No. 1.] In this design I have proceeded upon the idea of preserving as much as possible the old House entire, conceiving it might perhaps be viewed with somewhat of antiquarian feeling; I have, therefore, kept the new House by the side of the existing one, making the old House to serve as a Lobby, and the new House to occupy the site at present occupied by Mr. Ley's house.

736. You remove Mr. Ley's house and the intervening buildings, and place the new House there, to the eastward of it?—Yes.

737. Where do you make the Lobby?—I leave the present external entrances to the House undisturbed, availing myself of the various improvements that would arise from raising the level of the Lobby of the House of Lords. I also retain the present Lobby, making it serve as an outer Lobby to the present House, which I leave also in a great degree untouched, making it to form the Lobby to the new House; I should then propose to remove what are now the Clerk of the Fees' Offices, and all those lying to the south of the old House, not disturbing the Journal Office, the Ingrossing Office, or the Committee Clerks' Office, except to improve them; then, over the site of Messrs. Doringtons' office I should construct a corridor, so as to form an avenue leading to the new House, by which means, when the House was dividing, the public would still have a separate

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rate access without passing through the Lobby. There would also be another entrance by the gallery that leads to the Speaker's house.

738. The two streams would then be on the same level?—Yes, but there would be no difficulty in avoiding a collision. As regards this plan, No. 1, it has been prepared under the idea that you would still preserve the present committee-rooms next to Palace-yard; it therefore does not contemplate the erection of an entire range of committee-rooms, but only such necessary offices as would be removed in gaining the access over the site of Mr. Dorington's offices.

739. But underneath that building, which here extends from the Library to the old House, there would be rooms, as well as above?—Yes, there would be rooms underneath and above; you would have the whole area under the new House available for offices.

740. What are the dimensions of the body of the House?—The shape of the House is a square, with recesses on each side.

741. Will you state the dimensions of the square?—The recesses project from a square of 44 feet at the internal angles; the length of the House, that is, the part to be occupied by Members, is 68 feet, and 52 feet in width within the walls, to which is to be added the part occupied by the Peers' seats.

742. Where do you place the Speaker?—In a nearly similar situation as in the present House.

743. Is he so situated that all the Members can be seen by him?—Some of the Members are somewhat behind, but not so much so as at present; I have found great difficulty in that, as, if these seats be omitted, the House must be extended, either in width or in length; and I should consider that to be the best plan which would admit a House of the smallest convenient dimensions, and yet afford the greatest possible accommodation.

744. According to the plan of giving a sitting of two feet in width with three feet four between the seats, how many do you accommodate in that area?—Here I must apologize to the Committee when I say that I could not bring my mind to allow so large a space as three feet four to each sitting; I have therefore taken it at three feet only.

745. What do you consider would be ample room for the Members between seat and seat?—Three feet.

746. Upon what do you form that opinion?—In a great degree from the present House.

747. What is the present width of the seats?—From two feet eight to two feet 10 inches each.

748. And you add only two inches more?—Yes.

749. Would you have the spaces under the seats open for the feet?—That may be done.

750. Your plan extends only to three feet?—Yes.

751. How many Members would your plan accommodate?—At two feet to each person, 530; I am including the galleries as well; in the seats below 378 could sit.

752. Do you propose a gallery?—I do.

753. All round?—Only on the sides for Members.

754. Is it a projecting gallery or a receding gallery?—It is in part both; I should prefer a receding gallery, as this is, so far as I could effect it; but I conceive that the more compact the House can be kept, the better it will be for its purposes. I have protruded one seat into the square, but with that exception it is a receding gallery.

755. How many benches do you put in the gallery?—Four. [*The Witness delivered in a plan of the gallery.*]

756. One bench protrudes, and three recede?—Yes.

757. How many seats are under the gallery in the House?—Three seats.

758. Then the gallery on each side is to occupy the space, that is, a recess underneath?—Yes, nearly.

759. That is 40 feet in length?—Yes.

760. How many do you accommodate in those two galleries?—One hundred and fifty-two Members.

761. What do you do with the remainder of the 600 Members?—I will refer to another plan, which is the more correct one, it having been made since I arranged the general scheme, the plan of which I found was scarcely large enough, I therefore went through it again; that is, the corrected plan of the same thing.

762. Then

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762. Then, by the corrected plan, would the dimensions of the inner walls be the same?—Between the inner walls the width of the House would be 52 feet, with a corridor all round; the length of the House, from the front of the Peers' seats, is 68 feet to the other extremity.

763. Have you any seats behind the Speaker's chair?—Yes, on each side of it.

764. From the Speaker's chair to the western end, where the Peers' seats begin, how many feet is it?—Fifty-three feet.

765. From the Speaker's seat, how many feet are there behind?—Fifteen feet.

766. Then the greatest distance any Member would be from the Speaker would be about 50 feet?—Yes.

767. By that corrected plan, how many would sit in the body of the House?—Five hundred and seventy-eight, at 22 inches each sitting; but on crowded nights I should think 20 inches might be sufficient, because even with that space, when there is not a very full attendance, there will be most ample room for each Member, occasionally as much as three or four feet; therefore, when there is a press of Members, I think 20 inches might be enough, particularly as in the present House there is scarcely 17 inches space for each Member on crowded debates.

768. For the convenience of public business, you think the dimensions should be taken rather smaller, so that the Members should be somewhat crowded on crowded nights, rather than give so much room when there is not a full attendance?—Yes, that is my feeling; and 20 inches is considered to be sufficient in our churches. I am of course aware of the number of hours that gentlemen would have to sit; but I still think, taking one time with another, that from 20 to 22 inches would be quite enough to calculate on in arranging a new House.

769. Then, by means of the gallery in the two side recesses, with four rows of benches added to those in the body of the House, there would be ample room for the 600 Members?—Yes; the whole House, at two feet to each Member, would contain 530 Members, at 22 inches it would contain 578, at 20 inches 636, and at 18 inches 707; therefore it appeared to me that something between the 20 and 22 inches would be sufficient for the purposes of the House; every inch that is added, either to the width of the sittings, or from back to back of the seats, adds so greatly to the size of the House when multiplied by 600, that I considered it better to compress it as much as convenience would allow.

770. Could you so place the Members by any arrangement before the Speaker that he could see the whole of them?—Yes.

771. How much difference would that make?—A single bench along each side and two in front; and then there might be no space left behind the Speaker.

772. Then the whole dimensions would be 56 feet?—Yes.

773. Have you considered what effect those angles in the recesses would have upon the sound?—Yes, I have considered it with that view, and I conceive that a form somewhat approaching that which I have adopted here, would be most available for its purposes. There is always some degree of uncertainty in a new building as regards echo; but I am not aware of any serious objection on that account to those recesses.

774. What would be your view as to removing those angles, and making both ends of the House ellipses to permit the free passage of the sound?—My sentiments are opposed to the adoption of more circular ends than needs must.

775. On what ground?—I have frequently found that circular walls tend to promote echo. A case occurs to me, where the inconvenience has been found exceedingly great, I mean the Court-house at Chester, which is somewhat similar in form to the Chamber of Deputies at Paris.

776. You think then the square shape less likely to produce echo than the circular?—Yes.

777. Then why do you place a circular end to the eastward?—It is placed at one end of the square only, and I have therefore not the same fear of it in that single instance, as if it were to be repeated at each end. Corresponding circular recesses frequently produce reverberation, as in the familiar instances of the recesses on Westminster Bridge, where the voice of a party speaking in a low tone from the one side, with his mouth to the wall, is distinctly heard on the other.

778. Then on that principle, you ought to prefer removing the circular part from the eastern end, and confining it to a square form?—It might perhaps be advisable; I feel no great confidence in the good effects likely to result from such circular recess.

779. Would a gallery, projecting three feet, interrupt much the hearing of those in

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in the recesses?—I think not; but I would prefer keeping it as little projecting as possible for seeing and hearing.

780. At what elevation would you place the different seats; at what rise from the floor?—The seats in the Gallery would rise each about one foot ten inches higher than the other.

781. The Committee first ask what is the rise from the floor of the House to the back seat?—Seven feet six below.

782. That would be, on an average, 15 inches per seat?—Yes.

783. Would you raise all the seats equally, or vary the height according to the distance?—There would be a convenience in making the seats to rise in something of a curved line, so that the back seats might rise rather more rapidly than those in front.

784. How high above the back seat do you propose the Gallery to be?—Nine feet to the soffite of the Gallery.

785. This part would act as a sounding board?—Yes, in some degree.

786. Would it not be inconvenient, on account of the ventilation, and by the sound being stopped here? [*pointing to a part of the plan*]—The whole of this might be perforated through the centre of the ceiling.

787. Would not ventilation, when it carries with it the heated air of the House, carry with it a great deal of the sound of the voice?—If ventilation be produced by large apertures in single places, of course the current of air towards those openings will be very considerable; but the more the means of ventilation is distributed over the House, the less will be the injurious effect upon the voice.

788. Then proceeding further to the upper seat in the Gallery, which is to rise one foot ten, what would be the height above it to the ceiling?—About 12 feet.

789. Then would each person be in view from the Speaker; would not the angle of the front seat interfere with the sight of the Member at the back?—Very little. This is the section of the present House, and these are the seats occupied by the Members in the existing Gallery, from which they can with very great difficulty see the Speaker; but the wider apart the Galleries are placed, the more efficient will they be for the purposes of sight: the line of vision in the present Gallery misses the Speaker unless the Member leans forward.

790. Will the line of vision in your plan be brought more directly to the Speaker?—Yes; the more remote you take your position when at a right angle, the better will be the view of the Speaker. It has occurred to me that in case recesses be adopted, it might be found very advantageous, when there was but a thin House, if shutters were inserted, so as, by excluding the back seats, to reduce the size of the House from its capacity to contain 600 Members to a size better adapted for 300 or 400, by which means it would be more compact for its purposes. The practice I have alluded to was introduced at the English Opera; there the space under the boxes was enclosed between the pillars, so that the pit was confined in the early part of the evening to the front line of the boxes until the audience became more numerous, when the shutters were taken down, and the pit was thereby doubled in size. I conceive that some such means might be introduced with considerable effect in the House of Commons.

791. Suppose the height of the upper seat to be 20 feet from the floor, how high do you propose the ceiling to be from the floor?—About 33 feet.

792. Do you propose a flat ceiling?—I should prefer one slightly curved towards the centre.

793. You would not think that more liable to echo?—I should not be afraid of it, most of our theatres being so constructed.

794. Do you mean towards the centre and the ends?—I should make it to be a very flat cupola.

795. You would not be afraid of it producing an echo?—No.

796. The rise of the cupola would be how many feet?—About three feet.

797. How would you ventilate the House?—By an ample distribution of air flues.

798. Would not that affect the sound?—I think not if properly arranged. I presume some plan would also be adopted for warming the House by pipes.

799. Do you think 33 feet in height enough for a building to contain 600 people?—Yes; I should have no fear of it, if the ventilation be properly conducted.

800. What is the height of the present House?—Twenty-six feet.

801. You

801. You would only make it seven feet higher?—That is all that has hitherto appeared to me to be necessary.

802. What is the increased width of the new House compared to the old?—About 14 feet.

803. The width would be 14 feet more, and the height seven feet?—Yes; my object has been to keep the ceiling of the House as low as might be convenient for the purposes of ventilation over the Gallery, because the lower the ceiling can be kept, the greater is the probability of securing whatever advantage is to be gained as to sound.

804. How are Members to get to their seats, are they to ascend or descend from the corridor?—I should leave the general arrangement of the House on one level, and ascend from it right and left, and form frequent means of access to the seats, so that there should be no great length of seat without means of ingress and egress.

805. Would you have any entrance from the corridor behind?—Yes; on each side of the House there would be three entrances to the Members' seats, and also one at each end, making eight entrances.

806. You have got accommodation for 50 Peers; where do you put them?—In a similar situation to that which they occupy at present under the Strangers' Gallery.

807. Where do you propose to put the strangers?—In a similar situation.

808. How much higher do you place them than the Members' Gallery?—On the same range.

809. What is the distance between the recess where the Members' Gallery terminates and where the Strangers' Gallery terminates?—They terminate in the same angle, but they do not communicate.

810. How do you propose Members to get to their gallery?—By means of staircases at each end of the House, and from the corridor.

811. How are strangers to get to the Strangers' Gallery?—By a staircase from the outside passage.

812. Where are the Peers to enter?—Either at the same door as the Members, or from separate side entrances.

813. Do you consider the shape you have adopted better than an oval, which would avoid the angles and the recesses you have formed there?—I have not considered the oval shape, the semicircular I have.

814. The Committee would ask you whether any other shape could be adopted, giving the accommodation you propose, and avoiding the recesses?—I have directed my attention to the semicircular form, after the manner of the Chamber of Deputies in Paris, or the Greek theatres, and so far as I have tried it, I fear it would be difficult to obtain the same quantity of accommodation in the same number of superficial feet of contents within a House of that shape.

815. Would not Members be nearer each other than according to your shape?—I apprehend not, unless the floor of the House between the front seats be made very small; it would make the side walls of the House so remote, you would have a House nearly half as large again as this.

816. Underneath that area you propose to place the offices?—Yes, or additional committee-rooms.

817. Have you taken into consideration the possibility of building a new House so as to leave room for building at future periods committee-rooms adjoining for the convenience of public business?—Yes, I have in plan No. 2. That plan has been arranged with that view, conceiving it might eventually be found inconvenient to retain committee-rooms so remote as those near Palace Yard. This plan, No. 2, is designed so that either at present or at any future period a sufficient number of committee-rooms immediately surrounding the House may be erected.

818. You propose, in this plan, to place the building directly to the east of the present House?—Yes.

819. Not altering any portion of the House?—No, except in removing the present seats.

820. Do you propose the new committee-rooms to be the height of the House, or lower?—That will entirely depend upon the quantity of accommodation which may be required. The centre building may be made considerably taller than the wings, or they may be as high as the centre building, without impeding the ventilation. I have arranged them on each side of the House, with an area between, so as to admit ventilation, and to give light to the lower stories, and also to the Speaker's

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Dining-room, and to the old House; and I should in this case propose to remove all the small buildings lying south and north of the old House on both sides, and to make a corridor entirely round it, leading to the committee-rooms on the one side and the other, and also to the House.

821. And you open a communication with the Library?—Upon both plans the Library is immediately in connexion with the new buildings. I thought it might also be an object to obtain more convenient access to the House than at present exists, by forming a road from New Palace Yard, alongside the river, communicating with the House and with Old Palace Yard.

822. How near would this plan bring you to the river?—From the extremity of the steps to the river wall there is a break of about 10 feet, but by carrying the wharf wall in a straight line, there would be about 40 feet distance.

823. What extent of building do you contemplate?—Almost any requisite extent can be here obtained, and this appears to me to be the great advantage of this situation for the building. By the plan No. 2, the new buildings are placed directly to the eastward of the old House, whereas by the plan No. 1, it is placed east of the space lying between the Library and the old House of Commons.

824. What are the advantages you propose by placing the new House to the east of the old House?—That this site renders available the whole space from the Library on the south to a corresponding, or even greater, extent on the north for new committee-rooms if needed.

825. To be arranged on whatever plan, and to whatever extent may be thought necessary?—Yes; it renders all Mr. Ley's garden and the Speaker's garden available for whatever purposes they may be required.

826. Sacrificing a part of the Speaker's house?—Yes, but giving the facility of adding equal accommodation for the Speaker's house on the north of the present one. But it is only two small rooms of that house which would be disturbed by the new buildings.

827. At what expense do you contemplate the House simply, without any of the committee-rooms?—The design, No. 1, which is for the House merely, properly so called, I consider could be built for about 20,000*l.*

828. The House only, or with the approaches?—According to the plan.

829. Does it include the passage from the new House and Lobby to the House of Lords?—Yes, as shown upon that plan.

830. What portion of the expense would this portico be towards the river?—I have not the details of my estimate with me, and cannot say.

831. The 20,000*l.* includes the rooms below?—Yes.

832. It includes the taking away Mr. Ley's house, and all the small buildings on that side?—Yes, but not the re-building of Mr. Ley's house.

833. It includes the replacing the buildings between the Library and the present House?—Yes.

834. There would be no difficulty in making an opening from the upper and lower Libraries to the upper and lower Lobbies?—None.

835. Do you include the fitting up of the House inside?—Yes.

836. With what wood?—With wainscot, oak seats or mahogany.

837. All oak?—No; for the lining of the House I should think deal would be better.

838. Is there no convenience in having wood that would not require painting; deal requires painting, oak and mahogany do not?—Deal does not necessarily require painting; it looks rather raw certainly without, but when varnished it looks very well.

839. Would it include the preparations for ventilation?—Yes, but not anything for warming.

840. What do you consider the best mode of warming?—In such a case with hot water.

841. Would you think it necessary to warm the inside, or only the passages of the House?—The whole should be warmed, to prevent the ill effects of sudden transitions.

842. Should you consider it necessary to have fires in the House itself?—No.

843. Does the 20,000*l.* include a fire-proof roof?—No; but it would make no great difference whether the roof be constructed of iron or wood.

844. Have you considered there might be a considerably increased expense in forming a foundation on the banks of the river?—I have not gone into that matter minutely, as I was not aware of the precise nature of the bottom; I should think

six

six to nine feet below the surface, with the assistance of concrete, might be sufficient for a foundation.

845. If this portico, which is rather ornamental, was not built, what would that save?—About 2,000 *l.*

846. Do you calculate on any expense upon the old House?—Nothing, except removing the old seats and the Galleries.

847. Have you considered whether, if the House was built according to the plan No. 1, the level of the floor of the House of Commons might not be put upon the level of the House of Peers?—I imagine it would be more convenient to have the new House upon the level of the Lobby; if you use the old House as a Lobby, it would be convenient to have it upon the same level; the entrance to the House of Lords may be improved; there is at present an ascent and a descent, but if improved, there would be only five steps difference between the levels.

848. Have you considered that, according to this plan, more than two-thirds of the House would be under the Gallery or in the Gallery?—I imagine not one-half would be so placed; I should say, that at least the greater half would be without the line of the Gallery.

849. You have seven seats in the Gallery and under the Gallery?—Here are the lengths in both instances shown in the Gallery plan; I should think there are more than two-thirds in the House, and less than one-third in the Galleries.

850. Are there any other expenses which you contemplate would be incurred?—Not as regards the House itself.

851. By approaches from the westward the levels could be easily adjusted?—Yes, and I think the sum I have named would cover the alteration of the levels.

852. Do you contemplate the use of any stone?—Yes; all that which would be seen should be covered with stone.

853. What stone?—Portland stone would be preferable; but Bath stone more economical.

854. Would it be necessary to have stone at this part? (*pointing to a part of the plan*)—No; and if economy be the object, all external decoration may be omitted.

855. How do you propose that strangers should get in?—Immediately from the back of the building, by means of two staircases, each of which would lead to the Strangers' Gallery.

856. Have you formed any estimate what those committee-rooms in addition, and all those passages round the new House, as shown on the plan No. 2, would amount to?—It would cost about 50,000*l.*

857. Altogether?—Yes.

858. How many rooms of 20 feet square do you calculate on?—The rooms are generally laid down at about 26 feet square; there are at least 24 rooms of that size on the four floors; there are six of those rooms on each floor.

859. Exclusive of the area below the House?—Yes.

860. Below the House, you could accommodate all the offices, and then the committee-rooms on each side would amount to 24?—Yes; and besides that there are eight committee-rooms somewhat larger than the others, being upwards of 30 feet in length.

861. The total expense of these buildings, including the House of Commons and all, appears to be 50,000*l.*?—Yes; not more.

862. That includes the House of Commons, 24 committee-rooms of 26 feet, and eight rooms of 30 feet?—Yes.

863. It includes a passage completely round the old House of Commons?—Yes; and it also includes several other offices.

864. By the new Vote Office?—Yes.

865. In that you do not include the building additional rooms for the Speaker?—No, I do not.

866. Do you include the portico at the east, and the portico at the north and south of that plan?—No, that on the east front only.

867. Do you include facing the wall north, south, and east with stone?—Yes, with Portland stone.

868. What will the height of the building be?—About 60 feet above the surface of the garden.

869. Do you think that it would be feasible to erect an entire new building in a different part of the town?—Yes, provided a site can be obtained.

870. Do you think the site of the old palace at St. James's equally eligible as this site?—I should think it very likely.

871. Has

Mr. *George Allen.*

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871. Has it any advantages over the present site?—Probably more expense would be incurred near the river in obtaining a foundation than at St. James's.

872. Then you are of opinion that the erection of a building upon the site of St. James's would be preferable to the one here?—I do not think so, because I think the expense of pulling down the parts of St. James's, some of the walls of which are probably very thick, and firmly concreted together, would make up the difference.

873. Would not the old materials fetch as much as it would cost to pull them down?—They might.

874. Then there would still be that difference between the two sites?—Yes.

875. Have you sufficient knowledge of the actual locality of St. James's to state whether you think it would be sufficient to afford a new site for the House of Commons, and that we might find accommodation in the palace, as already constructed, for committee-rooms?—I should think you might for committee-rooms; but I answer very vaguely, as I am not sufficiently acquainted with the arrangement of that building.

876. Do you think that the present buildings attached to the House of Commons, and also those attached to the House of Lords, might, at no great expense, be converted into public offices, such as the Court of Review in Bankruptcy, the Court of the Master of the Rolls, the Record Office, the Judge's lodgings, and purposes of that kind?—Yes, I think they may be so converted at a very trifling expense.

877. Are you acquainted with the house at present occupied by the Ordnance in Pall Mall?—Only externally.

878. Are you able to say the probable value of that house to let when brought into the market?—Not at all.

879. In the event of the Office of Ordnance being brought down here, and that building sold which is now occupied by them in Pall Mall, do you not think that the expense of erecting a new House of Commons on the site of the old palace, and, if necessary, a new House of Lords, would be reduced to a comparatively small sum?—No; I think the money obtained by the sale of old buildings forms a very trifling amount, in comparison with the cost of erecting new ones.

880, The question supposes you are to sell the Ordnance Office as it is?—I should imagine that might go far towards erecting such new works as you might want at St. James's Palace.

881. Having given a plan for a new House of Commons, with a complete arrangement of all the requisite offices and committee-rooms for 50,000*l.*, to be built in any situation, what additional sum of money would it require to make an equal accommodation for the House of Lords, with all the requisite offices?—I should conceive it would take about 80,000 *l.* for the whole.

882. You consider that for 80,000*l.* you could build a House for the Lords, and also a House of Commons, on any site about town?—I consider so.

883. And if the buildings already occupied as public offices were brought to the hammer, it would reduce the expense *pro tanto?*—Certainly.

884. You could build a House of Commons and a House of Lords, with all their committee-rooms and requisite offices, in any situation in the metropolis, for 80,000*l.*?—I conceive that it might be done.

885. Suppose this was erected in a perfectly free space, you could erect it at a less expense, and have a more free admission of air?—If the subject was uncramped by its locality, a very superior design to this might be prepared.

886. It appears, upon the inspection of this plan, that the areas on each side of the House are scarcely adequate to the purpose of proper ventilation; if you were allowed a larger space and not cramped, as you appear to be upon your present plan, by locality, do you think you could make a more eligible plan than this, and to which no such objection could be made?—I have reason to hope that I could. In the Senate House at Washington, the plans of which some honourable Members may have seen, the architect had all the advantages to which the question alludes.

Mercurii, 1° die Maii, 1833.

JOSEPH HUME ESQ., IN THE CHAIR.

Mr. *Edward Blore*, Architect, called in; and further Examined.

Mr. *Edward Blore.*

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Plan 10.

887. IN addition to your former evidence, have you anything to offer to the Committee?—I have the plans which I promised to exhibit on my former examination.

888. Is this plan, No. 5, the manner in which you propose to fit up the new House?—It is the manner in which I propose to finish the interior; it is a sketch I have made out since, for the information of the Committee. I have also a new plan in the form of an octagon.

889. What is the width of the House?—In this new plan it is 80 feet diameter.

890. Where do you place the Speaker?—I place him here (*pointing to it*).

891. What is the greatest distance from the Speaker of any one Member?—A little more than 50 feet.

892. The seats behind him, are they for strangers or Members?—There is a retiring place behind for the Speaker.

893. Will all the Members be within sight of the Speaker?—Every one.

894. Do you alter the elevations in this case?—Not the elevations or rise of the seats, they remain just the same as before.

895. The only alteration is in the shape of the House?—Yes; and to get it within this compass, I propose to make the seats three feet from front to back, and to make them open underneath, so as to give more room for the feet.

896. The width from back to back would be three feet instead of three feet four?—Just so; and two feet for sitting. Allowing three feet from front to back, and two feet for sitting, you have accommodation for 640 on the ground in one room.

897. There is a large space by the bar, could not that be also used for sittings?—It might be so used, but I think it would be more convenient for it not to be.

898. What width is that?—Twelve feet.

899. Exclusive of the 12 feet allowed for the entrance from the Lobby, you have ample room for the whole of the seats?—Yes. I get a further space for 50 persons with Speaker's Orders, on the right of the Members' entrance.

900. Where do you place the Peers?—On the left-hand side of the Members' entrance.

901. Opposite to the Speaker?—Yes.

902. Do you see any reason for altering the situation which you have given for the Lobby, being between the Library and the old House?—No, every thing remains the same as in my former plan.

903. Where do you propose to put the Strangers' Gallery?—Above the seats for the Peers and Speaker's tickets.

904. Are we to understand that you have room for 50 Speaker's orders, and 50 Peers?—Yes.

905. Where do you propose putting the reporters?—At the back of the Speaker, and over his retiring room, with a private communication.

906. What other advantages do you consider this shape has to the one you gave in?—I should think that this is a remarkably good shape for hearing.

907. With a flat ceiling?—No, I should not give it a flat ceiling; I should give it a vaulted ceiling, something like that at the Chapter-house at York.

908. There is no echo in it?—I believe not.

909. Do you propose the Table to be in the centre of the House; would not that be inconvenient, as many Members would be sitting behind the clerks?—They would sit next to the Speaker.

910. You are aware that the clerks should be almost within reach of the Speaker?—There might be a separate table for the clerks; there is plenty of space.

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911. And this accommodation would be obtained without any gallery for the Members to sit in?—Without any gallery.

912. And yet there would be ample room for hearing?—I think so.

913. What would be the height of the seats to the back of the upper seats?—About nine feet; a foot to each seat.

914. Do you propose to vary the height of the seats as you advance?—I propose each seat to rise a foot.

915. Do you not propose that the lower seat should only rise a few inches, and then increase?—No, I do not propose that.

916. Would that kind of building make any alteration in the estimate of expense?—I do not think it would.

917. Do you still think that the sum of 17,000*l.* would be sufficient to complete the whole of the building?—I think it would.

918. And all the approaches and other buildings, according to plan No. 1?—All the buildings exhibited in this plan, and not more.

919. Have you any other observations that occurred to you, or any other plans to submit?—None at all.

The Right hon. *John Wilson Croker*, called in; and Examined.

The Right hon. *John W. Croker.*

Plan 11.

920. BEING well acquainted with the present House of Commons, and its capacity for affording proper accommodation, have you considered whether it could be altered in a manner to afford the accommodation which is wanted?—I am of opinion, that if St. Stephen's Chapel were restored to its original dimensions, and if the Speaker's Chair was placed in the centre of one side, that there might be accommodation found for very nearly the required number of Members; but to that project, though apparently the simplest, and certainly the cheapest, there are considerable objections, because the object in adhering to St. Stephen's Chapel would be the preservation of an ancient and venerable locality; but its restoration to its original dimensions and decorations would destroy the present character almost as much as an entirely new House; and moreover, the new and necessary fittings up for the accommodation of 500 or 600 Members could hardly be, in my opinion, reconciled with the original architectural character of the building. Besides which, I think there would be great difficulties in managing the communications between the new House and the outer Lobby, the Long Gallery, the Library, and the House of Lords; in other words, it appears to me that it would bring the House of Commons too close to the House of Lords and Westminster Hall (both of which I assume to be out of the scope of alteration) to afford the necessary *external* accommodation. I did however make a plan in that supposition, in which, the whole of St. Stephen's Chapel being appropriated to the new House of Commons, a Lobby should be built about the site of the present offices to the south of the House, communicating with the present outward or lower Lobby, and the Lobby of the House of Lords by that space, part of which is occupied by the place where great coats are now kept; but again I say, that I do not think, if you are prepared to undertake so great a work as giving a new and perfectly commodious chamber for the House of Commons, that the object gained, namely the being as it were upon the same spot would when you had changed all the features, compensate for the difficulties that would arise, and for, after all, a certain degree of imperfection in the accommodation. It might be done, cheaply done, but not, I fear, well done.

921. Do you recollect what are the dimensions of St. Stephen's Chapel, supposing it to be restored to its original dimensions in length and breadth?—I have no data at hand but the plan that has been printed by this Committee, which an Honourable Member has allowed me to look at. I observe, however, upon that plan, that there is no measurement of the buildings from east to west.

922. But is there not a scale?—Yes; but that scale is so obviously erroneous, by some clerical error, I presume, that I hesitate to rely on it.

923. You have said, that if it was restored, and the Chair placed on one side, you think there might be room for the accommodation; what is the length and width of the room?—From the plan I have just alluded to, I should suppose that St. Stephen's Chapel in its original dimensions was about 96 feet long, by 32 wide; but probably the real dimensions were 100 by 33 $\frac{1}{3}$.

924. Do you not think that the length in proportion to the breadth of the House you propose would be an objection?—No, because, as the Speaker's Chair would occupy the centre of one side, everybody would be within very commodious

modious distance of the Speaker, and, architecturally, the room would be the size originally designed.

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925. That is, approaching to the form of a double square, in which you would inscribe a semicircle?—Not exactly; I rather suppose it would be three squares: here is a rough sketch of this plan, which I have not thought it worth while to work out; for, besides the local and architectural difficulties which I have mentioned, I do not think the restoration of St. Stephen's Chapel and its appropriation as *a House for* 600 *Members* could be managed so as to insure you that it would be a good hearing room.

926. And also, that the passages of communication, both to and round the House, would be very imperfect?—The communications with the adjacent buildings I have just stated would be awkward, but the corridor *round* the House might be managed very well. It would no doubt be difficult, if you were to preserve all the old buttresses; but I believe the buttresses have been very much altered, and so much cut away, that they would not stand in the way of any improvement of that sort: you might replace the old buttresses by flying buttresses, under which the circular communication round the House would be conveniently made; and spaces for water-closets, &c. lighted and ventilated from the top, might be found between the buttresses.

927. Supposing that, without encroaching upon the Lobby, the present site could be made to accommodate all the Members, would it or not be the best situation for a House of Commons, looking at the House of Commons alone?—I think the present site, that is, the mere ground on which the House stands, can have no peculiar merit. Our attachment is to the edifice by association of ideas; and that if you so essentially alter St. Stephen's Chapel as to destroy those old associations, you may as well go anywhere else; and I would say in that case, had better go anywhere else, if you can accommodate yourselves more conveniently.

928. You think then that the present House of Commons is not so conveniently situated as it might be for the accommodation that is at present wanted?—It would be very surprising if an apartment of the most ancient palace in England, applied accidentally in the lapse of ages to a purpose for which it was not originally intended, should now be found to be, by some strange accident, the most convenient of all possible places.

929. I am supposing a new House of Commons, built without taking away the adjacent accommodation, as it now stands; could you place the House of Commons in a different situation, to be more contiguous or better situated than the present House of Commons?—It appears to me that the question presupposes that the adjacent accommodations are now so convenient and valuable, that you would retain them, and alter your House so as to adapt it to them; whereas, on the contrary, I believe that the accommodations about the House are notoriously imperfect, very crazy as buildings, and extremely incommodious in their local distribution. I know of no advantage whatever that attends the present adjacent accommodation or the accesses to the House. They are not well disposed for the transaction of business; they are not symmetrical with the House of Lords;—they are not symmetrical with Westminster Hall;—there is no proper access for Members, although we have had the misfortune to see the Prime Minister of the country murdered in the Lobby; and, on several occasions, Members have been personally insulted in going to the House. A Member who does his duty in Parliament is sometimes liable to offend individuals; he must pass every day of his life up a series of narrow dark, tortuous passages, where any individual who wishes to insult him may have the certain and easy opportunity of doing so. I therefore think that whatever you may do with the House of Commons itself, it would not be fit to leave the present approaches and adjoining buildings in the state in which they are: in short, though the present House may be inadequate to the due accommodation of the Members, it will hardly be denied that it is the least objectionable part of the whole vicinity.

930. Do not you think, as a person of great experience in the House of Commons, that there are other advantages connected with the business of the country, for instance, its contiguity to the House of Lords and to the Courts of Law?—The contiguity to the House of Lords is an absolute necessity in our constitution; for the King, when he comes to meet His Parliament, comes into the Chamber of the Lords, and must have His Commons within call; but, with regard to the Courts of Law, I confess I see no great advantage as regards the House of Commons exclusively; but the House of Lords being itself a tribunal, it undoubtedly is frequently convenient to the Chancellor, occasionally to the Judges, and almost constantly to the

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the Bar, that it should be in the neighbourhood of the Courts of Law. But when I recollect that the Chancellor finds no difficulty in holding his sittings in Lincoln's Inn, that the Master of the Rolls has or used to have sittings in Chancery Lane, and that the Bar make no difficulty in going to the Council Chamber, or still further, to Guildhall, I do not think the occasional convenience to the legal profession should interfere with any great and preponderating advantage, if such should appear likely to arise from a change of site.

931. Are we to understand it as your opinion, that it would be better to build an entirely new House than attempt any alteration of the present House?—Before I answer that question, I must take the liberty of saying, if I may do so without presumption, that the Committee appear to me to have calculated their new House upon too large a scale. The questions that have been read to me require accommodation for 600 Members, at three feet four by two feet each; that appears to me too much, and it will be followed, if adopted, by disappointment and regret: this will be made apparent by a consideration of what experience shows us to have been practically requisite. Before the Irish Union, it never happened, but once, that 500 Members were assembled, and that was in what has been called the "Great Walpolean Battle," at the end of Sir Robert Walpole's administration, when, I think, in the year 1742, 504 Members voted. From the time of the Irish Union to the first Reform Bill in 1830—for 30 years there were but 13 divisions which produced 500 Members, and but one which produced 550; the Reform Bill produced 608. Everybody knows that on such occasions the great pressure exists for only the few last hours of a debate: and it should also be recollected that the space and ventilation which would be required for 600 Members in the month of July, would be found uncomfortable for an ordinary House of 200 or 300 Members in the month of January:—to say nothing of the disagreeable effect on the House itself, and above all, on any persons speaking in it, of seeing a desert of unfurnished benches; it distracts the attention; and the Members, moving about in a large and thinly-attended House, would become prominent objects, and very much disturb both the audience and the orator. It must also be recollected that the human voice has its limits; and that it may be said pretty accurately that the smaller the room in which your audience can be personally accommodated, the better that audience will hear. Upon the whole, therefore, I should take the liberty of saying, that if you allow three feet by two for each sitting, I consider it an ample space; because, as you will no doubt have many and commodious gangways and a corridor all round the House, there will be infinitely less occasion to cross Members who are sitting than there is at present. You should, therefore, not compute, as seems to have been done, the dimensions of each seat, making full allowance for one Member to sit, and for another Member to pass. With regard to the running measure of two feet for the sitting, I have nothing to say; but that, in the last hour of a great debate, Members will find it not very inconvenient to sit much closer: and I am therefore of opinion, upon the whole, that if you make provision for the general business of the House in the House itself, to the amount of 400 or 450, you ought to consider by what means the extraordinary concourse of Members on extraordinary occasions can be provided for; and I believe that that would be best and most commodiously accomplished by a gallery, which on ordinary occasions does not offend you by its emptiness, and which at the moment of pressure affords seats for the additional number of Members. The chief difficulty that I have on this subject is as to the *hearing*; I am afraid that the House if calculated for 600 will be so large and high as to render the voice liable to reverberation; and I am not prepared to say whether, with a gallery, that portion of the House which might be placed *under* the gallery would be able to hear as well as one could wish.

932. What proportion do you propose to provide accommodation for in the gallery?—From 150 to 200; but I am now speaking of that portion of the House which may be placed *under* the gallery; and I express a doubt whether they would hear well, because in the Theatre of the Royal Institution, which is a very good lecture-room, and where the lecturer is in general very well heard, I was informed by one of the lecturers, that though the room is a small one compared to what the new House of Commons would be, (no hearer being, I believe, more than 30 feet from the lecturer;) I have been informed, I say, that the voice was imperfectly heard *under* the gallery. There is no point of natural science, I believe, that has been brought to so little practical certainty as that which is called catacoustics, or the doctrine of reflected sound; and I am certainly not prepared to give any opinion

on subjects of that nature, but facts therefore are the more precious, and I have thought it necessary to mention this fact to the Committee.

933. Have you made any observations of the effect of sound in any room that you could mention?—I can hardly say that I made any observations on that subject, but I recollect the effect of the voice in several public rooms. I remember the Irish House of Commons; the Irish House of Commons was a circle of about 50 or 55 feet; round it went a corridor; over that corridor was a receding gallery for strangers. In the front of the gallery, on the perpendicular of the wall of the House, ran a circle of columns which supported a dome above. The number of Members was 300, and as well as I recollect, the number of concentric seats were four or five. I was present at some of the great Union debates, and there seemed to me to be room enough; but, in the gallery at least, it was what I should call a very bad hearing House, as the Committee will easily conceive when they figure to themselves a high spherical dome, and a peripteral gallery running round the House.

934. Did the gallery go entirely round the House?—Yes.

935. Where was the Speaker placed?—His chair was, I think, in a line with the lower circle of seats, opposite the entrance gangway, and raised a few steps.

936. Was there any seats behind him?—Not exactly behind him, but nearly so, in the same way as in this House. In the Chamber of Deputies in Paris, which is semicircular, and which has an advancing seat for the more favoured class of strangers, and a receding gallery for the public, I also have found considerable difficulty in hearing, and being doubtful whether it was not some defect in my own hearing, I made inquiries of several Members, who confirmed my opinion of its being a very bad hearing House.

937. Was that owing to an echo?—It was owing, I thought, to a reverberation; and that was produced, probably, by a concurrence of causes, the size and height of the room, and the form of the walls and ceilings, as well, I think, as to the want of something to act as a sounding board behind or above the person speaking; for his voice appeared to me to ascend to the skylight, rather than come into the body of the House. I have also been in the great room, called Exeter Hall; I know not how it may be when the Hall is full of persons, but when I went there to look at it, it was empty, and I found a very inconvenient reverberation of the voice. I have seen also the Legislative Chambers in Holland, but they are of much smaller dimensions. While the present House of Commons was under alteration for the accommodation of the additional Members at the Union, the House sat in the Painted Chamber, and I can state that it was a remarkably good place for hearing; and I thought my ear could distinguish that it chiefly owed that merit to the plain construction of the ceiling. I am convinced too that the good hearing in the Gallery of the present House is produced by the shape of the ceiling. Upon the whole, my opinion is, that you hear well pretty nearly in proportion to the lowess and flatness of the ceiling. I say nothing about the walls: I fancy that they are, generally speaking, of less importance; but they are in most instances so broken by columns and windows, and a variety of decorations or accidental additions, that I am unable to give any opinion on that subject, except only that I may state, as a fact, that I have known a room made a very good hearing room from a very bad one, by being hung with tapestry; and on the other hand, everybody in London knows that ladies who give concerts in small houses, make tolerable music-rooms by taking down the curtains, and taking up the carpets. In the former case the object was to check reverberation, in the latter to promote it. I think it was Mr. Farraday, of the Royal Institution, who told me the other day, that at some room in which he had lectured, they found a very disagreable reverberation from the bare walls, and that reverberation was cured by running a horizontal groove, or something in the nature of a frieze, round the walls.

938. What is the result of your opinion, considering all that you have stated, with regard to the shape of a House you would recommend in the vicinity of the present old House?—I should say, if there be no objection as to a spherical shape for hearing, I should prefer a semicircle with elongated sides. An exact semicircle is undoubtedly the best shape for a lecture room, or for a legislative assembly, where people speak from a *tribune*; but I believe that such a shape would not be consistent with our Parliamentary habits; there would be some difficulty also in making, in an exact semicircle, a convenient place for the clerks, and the table; I should therefore propose, as I have said, a semicircle, with the elongated sides, or (if it should be thought better) an oblong room, with semicircular seats in the two angles opposite the Chair.

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Of Houses of these two shapes, to be attached either to the north or south sides of St. Stephen's Chapel, I have made a very rough and imperfect sketch, which, if the Committee will accept, I shall offer to them. [*They were produced, and are marked* (A).]

939. What proportion does the depth of the elongated side bear to the radius of your circle?—That would be a matter of detail, to be settled according to the space of ground you have to occupy, the number of Members to be disposed of, and to the opinion of the Committee as to the advantages that there would be from having a greater or a lesser number of the Members placed on the sides and directly opposite to one another, rather than on the circular seats in front.

940. Supposing you had the choice of the ground, what ratio between the depth of the seat and the radius of the semicircle would you consider the most expedient?—On general principles, I should be inclined to say, that the parallel side benches should be about the length of the radius of the semicircular portion. In considering these matters, we should, I think, always endeavour to look at the old forms and habits of the present House of Commons, and to accommodate the new building as much as possible to them; I therefore had wished to afford sitting for from 11 to 15 gentlemen in the elongated sides, at each side of the Speaker's Chair, for what are called the Treasury and Opposition Benches, and with similar benches behind them respectively.

941. Is this plan (A.) which you have delivered in, that which you would consider as on the whole the best?—No: the forms of the House I think very good, but there is I think a better position. At the time I made this design, I was not furnished with the general plan of the vicinity, and not being aware of any other applicable space, I contemplated putting the new House of Commons *south* of the old House, between St. Stephen's Chapel and the Library, and restoring St. Stephen's Chapel to its original shape and dimensions, making the entrance to the new House the centre window of the ancient chapel, on the south side, and filling up the whole of the vacant space to the Library, including the space where the Long Gallery now runs; but the Long Gallery being on a level below the present House and of course the new House, you would have still reached it from the lower Lobby, and it would have afforded the same kind of communication that it does at present; this plan, (though as I shall state by and by, I should now propose a considerable modification of it,) has a great many advantages: First, it does not jut out further towards the river than the present buildings; and I think the Committee will find that any building that shall protrude very much beyond the present line, besides its disfiguring the exterior (on which, however, I lay no great stress), will be found to impede the light and air of the adjacent buildings so much that it would be better if possible not to make any very considerable encroachment on the garden. In the next place, the communication to the Library would be direct. In the third place, the Peers would come to the House of Commons very conveniently from the upper door of their own House, going up one flight of the present Library stairs into their gallery. You would also have well ventilated water-closets and a corridor all round the House; and over the corridor the Strangers' Gallery receding.

942. You would not object to another gallery for the reporters above and behind the Speaker's Chair?—If it be intended to have a gallery especially appropriated for reporters, I should have no objection to place them in that situation, because they have a certain degree of responsibility, which may justify you in placing them out of the reach of the Speaker's eye; but I think it might be exceedingly inconvenient to have any part of the gallery allotted to strangers in general that the Speaker could not see. Every precaution should be taken to guard against irregularities in the Strangers' Gallery.

943. What are the dimensions of this space?—The space, as stated upon your plan, is 63 feet one way, and about 72 or 73 the other. I speak with uncertainty as the plan is not figured with a complete measurement in the latter direction.

944. Do you not consider that the building a House with the Library to the south, and the old House to the north, with the House of Lords to the westward, might incommode the ventilation?—I apprehend that no ventilation will be found quite satisfactory except from below to above; in other words, that lateral ventilation would be very imperfect, partial and inconvenient, occasioning what are called "*draughts.*"

945. Does not lateral ventilation interfere less with the sound of the voice?—That I apprehend depends entirely on the mode in which it is applied; besides, it appears

appears to me that where you do not want light, ventilation, whether lateral or perpendicular, may be easily procured.

946. Do you propose the communication between the Houses of Lords and Commons to be through the old House, or in what way?—In the plan now under discussion, as well as in the other already alluded to, I propose the official communication between the Lords and Commons to be through St. Stephen's Chapel.

947. Do you propose filling the space under the area of the new House with offices?—Certainly. The Vote-office I think might be placed on the level of the new Lobby, under the back benches and corridor of the new House.

948. How would you light the offices below, surrounded as they are on three sides by walls?—They would be lighted from the front, which is 63 feet; the back part would be dark, but that might be used as a depôt for the immense mass of papers which are daily accumulating in all the offices.

949. What objection do you see, supposing the plan you have stated to be the best, to placing the House somewhat more to the eastward of the site designated on your plan, so as to give the whole area underneath light and access, to have the whole space occupied?—I had already anticipated that amendment, as the Committee will see by a note on my plan (A.) The plan under consideration adopts the *whole* of St. Stephen's Chapel as a Lobby, and as the door of communication between the House and the Lobby is in the common centre of both, it necessarily obliges the wall of the House to extend as far as the wall of the Lobby, that is, as will be seen on the plan, to the wall of the House of Lords; but if the present House of Commons only be taken for the Lobby, the entrance to the new House would be from the second window from the east instead of the third, and this alteration would leave of course the width of one-fifth of the whole of St. Stephen's Chapel (say 20 feet), open on the westward for an area between the House of Lords and the House of Commons, where the Long Gallery now is.

950. Have you considered the possibility of placing the new House separate from any of the buildings; but making the old House the Lobby or means of approach, so as to have a complete open space around all the sides except that adjoining the old House?—That is, in other words, protruding the new House due eastward into the garden. I have of course thought of that design; it was the most obvious of all; but I hesitate to recommend it, for two reasons; first, that it interferes with the Speaker's present Dining-room, and that it would darken part of the Speaker's house, so much so as to render I think that part nearly useless.

951. Even if it was removed 10 or 12 feet from the present old House?—Certainly, I am of that opinion. My second reason was one which I have already stated, namely, that the protrusion of so great a mass of building would be unsightly; would encroach too much on the narrow garden; and would intercept light and air from the adjacent buildings: else, there can be no doubt that restoring the side windows of St. Stephen's Chapel, and entering the new House from the centre of its east end, would be the most symmetrical and striking architectural arrangement; and would be extremely beautiful. The designs I have made for the form of the House, would be equally applicable to this situation.

952. You have intimated that this plan (A.) is not however that which you would prefer?—After I had made this plan (A.), a noble Member was so good as to show me the ground plan of the whole vicinity, on which I thought I saw a better arrangement, and indeed the best situation that this vicinity affords; namely, to build the new House on the *north* side of the present House, instead of the *south* side, as in my imperfect information I at first proposed. This plan I produce, marked (B.) By this I admit that we must destroy some of the Speaker's present house, two or three rooms, but they are rooms that will be equally lost for all domestic purposes, if you should build the House at the east end and in front of them. It would not be necessary to touch any of the State Apartments of the present Speaker's house, nor would you interfere with a considerable portion of the more private part of the House. The distance from the wall of the House of Commons to the wall of the north cloister of the Speaker's house appears by the plan to be about 100 feet, of which the new House would occupy about 60: that would leave an area of about 40 between the new House and the Speaker's Cloister. In this case the present House of Commons should be the Lobby; and here I beg leave to say that in the questions that were shown me by the Committee, it is said that in the Lobby we should make provision for 600 Members: this I take the liberty of thinking is an error. I do not see why the

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Lobby should be capable of containing any such number; and I consider the present House of Commons, 61 by 32, would be a Lobby sufficiently large for any occasion, particularly since the new rule, which I understand has been adopted, that the Speaker sends out the party that appears to be the smallest in number. Taking therefore the present House of Commons for the Lobby, I would have a screen, in conformity with the taste of the original chapel, between it and what is at present the Lobby, which should then become an outward Lobby, to which only the public should be admitted, and through which the external business should circulate. Supposing the new House to be 90 feet long, from east to west, and 60, as I have said, the other way, there would then be, I apprehend, a space of about 25 feet between the wall of Westminster Hall and the west wall of the new House, and 40 feet between it and the Speaker's Cloister. The new House would therefore be insulated on every side, except the point of junction with the Lobby; and (which would be very convenient) a portion of the Speaker's private house, that would adjoin the new building nearly behind the Chair. I see some considerable advantages resulting from this plan; you get, what you cannot in any other way, a private entrance for Members adjoining the Speaker's Court-yard, and one also, if you please, from Westminster Hall. Instead of bringing the House of Commons closer to the House of Lords, you remove it further from it. The lower story towards the east would restore to the Speaker's house handsomer apartments than are taken away; and towards the north and west a considerable area round the House would ventilate it well, and light it, though somewhat imperfectly; the lower story on these sides would be nearly as light as the present cloisters; indeed, the whole basement story might be restored to the Speaker's house: but you might, I apprehend, get a very good Vote-office on the level of the Lobby, under the back benches and corridor of the House, which must rise 10 or 11 feet above the floor; but it would not, I conceive, be necessary to have recourse even to this expedient, as there would be ample room for a Vote-office at the other, or south side of the new Lobby. But the chief advantage I look to is the insulating the House, and making a better access for Members and a more convenient distribution of the offices for business. I should then say, that it would be advisable to build a new Library, Vote-office and what is called a Smoking-room, along the whole of the opposite or south side of St. Stephen's Chapel, about the width of the present Ingrossing-office, and to apply the new Library as a committee-room, or additional offices, or something of that sort. The nearer approach of the Library and a convenient Smoking-room are now of more importance than ever. In old times such accommodations were less necessary; Members came and sat a few hours in their seats, heard the debate, voted and went away in reasonable time; but now a Member of Parliament, who attends his duty closely, spends 12 hours a day in the House, to say nothing of committees. It therefore becomes important that he should have the convenience of this Library, and a room above stairs for the same purposes as that which is now called the Smoking-room, where they can write by day and occasionally retire in the evening, and which ought to communicate immediately with the Lobby; and perhaps over that would be the best place for the refreshment-rooms, which are now at an inconvenient distance.

953. Do you leave any space where the committee-rooms should be built?—By the plan now in discussion, I do not interfere with any existing committee-room; on the contrary, one might be gained from the present Library; but if you prefer leaving the Library where it is, you may find room for one or two additional committee-rooms, besides the Vote-office, on the south side of St. Stephen's Chapel. I think, however, on every account it would be better to bring the Library close to the Lobby.

954. Will you not have the advantage, by placing the new House east of the space you propose to occupy in the first plan, further out, by which you have communication with the Library, and for committee-rooms right or left?—I conceive the objection to that is, what I have already stated, that you will protrude the new building so very much into the garden as to be unsightly, and to interfere with the light and ventilation of the adjoining buildings; and the space you leave behind will be very dark and inconvenient. Another objection is, that you will not enter from your Lobby into your new House from any centre—not symmetrically; you escape through a corner, and then you must have another corridor or lobby of considerable dimensions.

955. Your opinion decidedly is, that the north side of the old House is the best situation afforded by this vicinity?—Decidedly.

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956. Although the area underneath would be to a certain degree lost for want of light?—Not much if at all more so than at present.

957. Have you considered whether there is any other site (not confining you to this vicinity) where you think the House could be better placed?—I think there is a much more convenient situation, the site of St. James's Palace, to which there can be little objection but that of the increased expense of removing to an entirely new locality; but in such a business as this, I really think the expense ought to be a secondary consideration. There is no purchase of ground involved; there is no sumptuous and extravagant furniture to be provided; what is spent will be spent in buying the productions of our own country, and upon the labour of our own countrymen; and everybody knows there has been for the last 20 years a great quantity more building going on in London and its vicinity than there happens to be just now; so that I understand that a great number of tradesmen, artificers and workmen connected with building, are at this moment in a state of considerable distress. I therefore think that it would not be at all felt as a public burthen, but would rather be a public advantage and an alleviation of distress, that any considerable national work in the way of building should be undertaken. I remember to have been struck by an observation made in the House of Commons by, I believe, an Honourable Member now present, on the subject of the new street opposite Waterloo Bridge, in which he very properly said, and showed, that although it was an apparent expense at first, it would be amply compensated to the public by the diffusion of the expenses of the work, and even to the revenue, from the duties on the articles employed. I should say, that if we are not to be bound by local associations, it is hardly possible to conceive a more inconvenient situation than the Palace of Westminster. I suppose I need not inform the Committee, that the House of Lords and the House of Commons sat in the King's Palace at Westminster because it happened to be the Royal residence when these assemblies became frequent, and the Courts of Justice sat in the Hall of the Palace for the same reason. There therefore would be no constitutional objection to their removal to the Palace of St. James's, where it is not to be denied they would be much more conveniently situated for every class of persons, except the small number of persons of the legal profession who may have an occasional attendance at either of the Houses. But when I recollect, as I have already stated, that the legal gentlemen make no difficulty in going to Chancery-lane and Guildhall, I do not think that they should complain if they were sometimes called upon to cross the Park. The space that is occupied at present by St. James's Palace and the Garden is I believe a square of 400 or 500 feet, which would afford ample accommodation both for the Lords and Commons, which of course cannot be separated. I make this proposition on the hypothesis that the whole area would be applicable, and that His Majesty would not only reside, but hold his courts, at Buckingham Palace.

958. Do you think that any of the buildings now existing at St. James's could be made applicable to this new purpose?—I do not think it would be worth while to retain any of them.

959. You make this proposition with a view to the personal convenience of Members as well as to a better site for a new building?—Certainly. It must be recollected, as I have just said, that the life of a Member of the House of Commons is exceedingly different from what it used to be; he spends much more of his time in and about the House of Commons; and it is therefore desirable that it should be more in the centre of the town, and more in the neighbourhood of the hotels, clubs, lodging-houses and residences of the higher classes.

960. If the erection of a new House of Commons could be executed in such a manner as to answer its purposes for the greatest length of time, and to obviate all future objections, would not the combined objects of centrallity, with reference to the general residence of Members, and easy accessibility with the least loss of time, and perfect ventilation and purity of atmosphere, and of sufficient accommodation of all the Members, and rooms for all the necessary offices, be more effectually accomplished by building it on a new site, either at Charing-cross, St. James's Palace, opposite the entrance to Regent-street, or on the site of the old Palace of St. James's?—I can have no hesitation in saying, that provided such a new building be well considered, and above all considered carefully with reference to the 200 years' experience that we have had of the advantages and disadvantages of the old buildings, that a new edifice ought to have all the superiority that the Honourable Member requires. I am further of opinion, that none of the places mentioned in the

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question are so central and generally convenient as the Old Palace of St. James's, which has this further advantage, that it would require no outlay for the purchase of ground, which has been found to be the absorbing expense of all new works of late, and (which also is a consideration of some importance) that its position would afford the finest situation for a creditable display of the architectural taste of the country. I cannot but observe, that it seems to me a strong verdict of public opinion against the present position of the Houses of Lords and Commons, that notwithstanding the great inducement which their vicinity might have been expected to afford, buildings should have dwindled in this neighbourhood rather than increased; that it never has been possible to establish a good club or a respectable hotel in the neighbourhood; and that this part of the town in which *à priori* one should have said that residences would be most in request, is beyond all doubt the most deteriorated and neglected part of the West-end of the metropolis.

Mr. *Francis Goodwin*, Architect, called in; and Examined.

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Plans 12, 13, 14.

961. HAVE you constructed any public buildings?—Yes, about 25, including 15 churches, 10 of which were erected under the Parliamentary grant; the town-hall and public offices of Manchester, of which I have been architect for 11 years, and which are now finished under my direction; and also the county prisons of Derby, and other public buildings of various descriptions.

962. Have you been furnished with the questions prepared by this Committee for the different architects?—I have.

963. Have you had the ground plan of the Houses of Parliament and adjacent buildings?—Yes.

964. Have you examined and considered them all?—I have. I have prepared two designs, which are more explanatory of my ideas on the subject than any verbal descriptions which I can give to the Committee, without reference to those designs?—[Mr. *Goodwin then produced two designs*, Nos. 1 & 2.]

965. Have the goodness to state in what manner you would make the alterations which you propose in the design No. 2. I propose to take down part of the present House of Commons, on the north side, to the extent of two of the arches and piers at the east end of the north wall, and the whole of the east end extending the width of the new House of Commons, to the south wall of the cloister of the Speaker's house, by which means I shall obtain a width of 54 feet for the new House of Commons, retaining the whole of the walls of St. Stephen's Chapel, at the south side of the House, as it now stands, with three arches of the north wall, which will form part of the proposed Lobby.

966. You propose to extend the building for the new House of Commons to the east?—Yes, 119 feet forming a parallelogram, the ends being segments of a circle; the length, however, might be reduced to 105 feet, by the introduction of galleries on the north and south sides of the House, partly receding and partly projecting, the projection not exceeding three feet 10 inches.

967. Do you propose to have no galleries in the larger dimensions?—Yes, a gallery for the Peers and strangers, but no side galleries.

968. Where do you propose to place the Speaker?—At the east end, opposite the entrance.

969. Would Members be sitting behind the Speaker?—Yes, the new House of Commons, according to the design No. 2, would have 688 seats for the accommodation of the Members, allowing three feet four inches by two feet to each person; the four seats on each side of the centre might be removed, and there would still remain accommodation for 602 Members.

970. What would be the greatest distance from the Speaker's Chair to the remotest Member?—Eighty-nine feet.

971. How many seats do you propose to have?—Five on the north and south sides, and 13 at the west end, opposite the Speaker.

972. What elevation do you propose to give to each seat?—Thirteen inches.

973. Do you consider that a person 89 feet from another, could hear distinctly?—I should consider that any one would be sufficiently audible at such a distance; I have erected several churches, in which I have placed the pulpit at the extreme end of the building, and I could hear more distinctly at the distance of 90 feet than I should have done in the middle of the church.

974. Do you think that persons in the intermediate space could be equally well heard?—

heard?—I attended the late Archdeacon Woolaston at St. James's Church, Piccadilly, purposely to make experiments upon sound, in reference to the construction of churches, and we decidedly ascertained that the voice was more distinctly conveyed to every part of the church when speaking from the extremities, or immediately from the sides of the church, than from any intermediate point.

975. The advantage of having a reverberatory surface behind you would not apply when a Member spoke from an intermediate bench?—I think that will apply to rooms of any form.

976. What are the advantages you suppose a building so long and narrow has over one of a different shape?—Sound is conveyed with greater force to every part of a room having a much greater length than breadth of the same area, than a room approaching nearer to a square, as the lateral and oblique rays (like light) are more immediately reflected and united with the direct sound, and conveyed to the remotest part of the area.

977. There are other alterations contemplated in your plan; what buildings do you propose to remove?—It is necessary to remove Mr. Ley's house and the present Library, to obtain a good general arrangement of all the apartments, official offices and committee-rooms requisite for the business of the House of Commons, as well as to attain a facility of access to the Library for the new House; also for light and ventilation to the different parts of the structure. I propose a new library, and a retiring-room for the Members in cases of divisions, separated from the new House only by a corridor, and under these rooms space will be afforded sufficient for all the clerks' offices, and above them 14 committee-rooms, 30 feet by 20; a space eastward under the new House will be converted into a dining-room for the Speaker, and the space under the present Lobby will be appropriated as a Lobby for the public, which can be approached by the present passage to Mr. Ley's house, in order that the Lobby of the House on the level of the present House of Commons, and the entrance to it may be exclusively appropriated for its Members.

978. Do you propose to take away the Speaker's Dining-room, underneath the Chapel?—Of course. I have appropriated a larger space than the present dining-room for that purpose, under the new House at the eastern extremity, in order to obtain light.

979. What advantage do you derive from removing the present Library?—It gives me the opportunity of erecting all the offices necessary for the House as well as the committee-rooms, in a situation more advantageous as regards access to the new House, and as it respects light and ventilation.

980. Could you not leave the present Library, and find sufficient room for the offices?—No, certainly not, as there would not be sufficient offices after removing those attached to the site of the present House, unless separately erected; the under part of the intended Library will afford all the offices required, and the materials of the old Library may be used in the erections of the new one, or for other buildings.

981. Are these offices on the ground-floor intended to supply the Ingrossing and Fee offices?—They are. This building would be erected on the south side, and attached to the new House, and would be three stories above the ground-floor, the ground-floor would be occupied by the clerks' offices, that on the level with the House, and separated from it only by a corridor, would be appropriated to the Library, and the two others above it would contain the 14 committee-rooms.

982. By what staircase would you ascend?—There is a spacious staircase at the extremity of the south corridor, separating the Library from the Members' retiring-room, adjoining the east wall of the Painted Chamber; and above this corridor are corresponding ones, communicating with the general corridor, surrounding the House itself, and at right angles to the one on the south side.

983. What do you propose to do for a Lobby for a division?—The Lobby at the west end of the House, which would be upwards of 50 feet square (larger than the area of the present House) and the retiring-room for the Members (57 feet by 30), would afford ample accommodation on such occasions.

984. Is there any light to the Lobby?—It would be lighted by a window on the south side, and by others over the side aisles.

985. What would be the height from the floor of the House?—Fifty-four feet.

986. Do you propose the ceiling to be flat?—The general surface would be flat, but the sides would be coved.

987. By reducing your dimensions, how many could you accommodate in the body

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body of the House?—I could take away the seats at the back of the Speaker's Chair for 86 Members, and then there would remain 542 in the body of the House, independently of those in the Gallery.

988. Could you not widen the House, and shorten its length?—I could; but I have carried out the north wall of the new House as near to the cloister of the Speaker's house as I could do without disturbing the latter; and the opposite side is determined by the south wall of St. Stephen's Chapel.

989. Dou you interfere with the Speaker's house?—Yes, but in a very trifling degree, cutting off about 15 feet by the north wall of the new House, which is continuous with that of the adjacent cloister. The access to the present House is as inconvenient as it is mean; I would therefore remove all the cross walls which now separate the space between the Cloak-room and the Lobby into sundry useless rooms, and converting the first mentioned into a vestibule, form the whole width of the structure between the end of Westminster Hall and Old Palace Yard into a gallery of approach, so as to extend in a direct line of 139 feet, by a width of 22 feet. This approach (which would be for the Members exclusively) would receive much architectural character and variety from being subdivided into compartments by four separate flights of steps, while the vista would be continuous to the Lobby, and thence carried into the House itself.

990. That can be done in whatever situation you place the House?—Certainly, and at no very great expense; since there is little to erect, there would be little of positive decoration, the effect being chiefly produced by mere architectural forms, as will be evident by referring to the section; while, too, this gallery would keep up a desirable consistency of architecture between the House itself and other parts of the general pile of building, the very different style of St. Stephen's Chapel would, as thus managed, produce rather an agreeable transition, than the contrary, and bring into immediate comparison what may be fairly considered our two national styles of building, one indigenous to this country, the other so extensively and generally adopted as to be now perfectly naturalized among us.

991. There would be three flights from the entrance to the Lobby of the House of Peers, and four steps into the Lobby of the House of Commons?—Yes.

992. Would the approach for the public to the Strangers' Gallery be the same as that for the Members of the House?—No.

993. In what way do you contrive the approach to the committee-rooms, Numbers 11, 12 & 13?—There is a communication with those rooms above, as before, on the north side of the proposed entrance.

994. You take away the committee-room, No. 12, but you leave the room above?—Yes.

995. Have you estimated at what expense these alterations can be made?—I put it at 22,000*l.*

996. On the whole do you recommend that this plan be adopted?—I do.

997. How long would you be in finishing it?—I think it might be very well done in 15 months.

998. Does the 22,000*l.* include the expense of fitting up a temporary House?—No; but the additional sum required for that purpose would not be very great.

999. What do you propose to erect for the 22,000*l.*?—The new House, with the corridors.

1000. Do you include the seats and fittings inside?—Every thing, with the exception of the lining of the seats, which I have not estimated, and this I recommend to be of leather, as it absorbs less sound than cloth, or any other material.

1001. What do you propose to erect for the 18,000*l.*?—The new Library, the corridors, the retiring-room for the Members, the eight offices under them for clerks, and 14 committee-rooms, not less than 30 feet by 20, including the alteration of the Long Gallery, and the offices over it.

1002. Do you recommend this plan on account of its cheapness, or on what ground?—I recommend it for the simplicity of its general arrangement, for the concentrating of all the official apartments required for the business of the House, together with the committee-rooms, and for its providing all such accommodations without unnecessarily disturbing the other parts of the structure.

1003. How far to the eastward of the other building would the new building project?—Ninety-two feet; but should the House be reduced in length, as proposed, then only 78 feet.

1004. You

1004. You think 60,000*l.* would be required to carry every part of your plan into execution?—I have stated it at rather more than I think it will amount to, because I have provided for contingencies which may not occur.

1005. Supposing the present House be allowed to remain, have you proposed any plan?—I have; plan No. 1 provides for converting the present House of Commons into a library.

1006. Describe plan No. 1?—As regards the approach from the entrance, as far as St. Stephen's Chapel, this plan would be precisely the same as that described as design No. 2; according to this plan the present Lobby would become an anteroom, communicating immediately both with the Library and the Long Gallery, and the latter would open into an octangular saloon or vestibule, connecting it with the retiring-room for the Members; this last-mentioned room would also serve as a Lobby for the Members to retire to in case of a division of the House.

1007. Do you remove the present Library and Mr. Ley's house?—Yes; the site between the present House, the Painted Chamber, and the Long Gallery, will be required to carry this design into execution.

1008. In this plan you contemplate the old House to be a library, in lieu of the Library removed?—Yes, with a corridor on the south side of it, communicating with a staircase leading to the Strangers' Gallery, and this staircase will be approached by strangers through the passage now leading to Mr. Ley's house.

1009. Will there be any buildings under the corridor level with the Library?—Yes, a passage beneath it for the public to have access to the clerks' offices proposed to be formed under the new House of Commons.

1010. State what the form of the new House will be?—It will be a semicircle, with the addition of a parallelogram.

1011. What is the radius of the semicircular part?—Forty-one feet.

1012. What is the area of the parallelogram?—Eighty-two by 36 feet. The Speaker would be placed in the west end of the House, and would have a private entrance into it through the old passage at Solomon's Porch to his own residence; and there would be three entrances for the Members.

1013. How many seats do you propose for the accommodation of Members?—Ten benches.

1014. How many Members will that accommodate?—Five hundred and thirty-eight on the ground-floor, and 130 in the Gallery, making 668.

1015. Do you propose to place the Speaker on the floor, or on an elevation?—On an elevation of two steps.

1016. What rise do you give to the two steps?—Thirteen inches.

1017. How high will the Gallery be above the back bench?—I have not made a section of this plan, but the height would not be less than 18 feet three inches.

1018. How far do you propose the Gallery to advance?—Five feet ten inches.

1019. Then the Gallery will cover only one seat?—Only one seat; but there is a passage at the back of the first seat, making the projection five feet ten inches.

1020. How many rows of seats have you in the Gallery?—Only two, one of which is recessed in the wall.

1021. Where would you place the Peers' Gallery?—The Gallery for the Peers would extend across the House, behind the Speaker's Chair.

1022. What elevation do you give the seats in the Gallery?—Thirteen inches.

1023. What height will the ceiling be from the floor?—Fifty-three feet.

1024. Do you contemplate having offices underneath?—Yes, there will be six offices with strong rooms for papers; besides which, there would be water-closets, and likewise plenty of space under cover, for persons waiting the business of the House.

1025. Have you considered how far the hearing would be affected by the Gallery for strangers?—I think the depth of the Strangers' Gallery objectionable.

1026. How many is it calculated to hold?—One hundred and fifty.

1027. What would be the greatest distance of any Member from the Speaker's Chair?—Sixty-four feet.

1028. If the dimensions were reduced to three feet width, and 20 inches sitting-room, what reduction would that make?—About six feet eight inches in the whole diameter; yet I am of opinion the Committee ought not to think of reducing the depth of the seats to less than three feet three inches, as it would be attended with great inconvenience.

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1029. Do you see any objection to letting any part of the three feet three inches be under the bench immediately before you?—No: there would be ample room for person's legs when sitting in the three feet four inches.

1030. If the rise were something less than 13 inches, could you not then do it?—Then you might.

1031. Do you consider the rise essential?—The height must depend very much on the extent you have to see; the lower seat is level with the floor of the House; if you were to make two steps five inches and a half, it would be quite sufficient, making a rise of 11 inches.

1032. Supposing it were a rise of 11 inches, what space would you have for the feet to go under the seat in front?—There would be seven inches.

1033. Have you considered what the effect of a gallery would be, as regards sound?—I think a gallery, projecting five feet, would have the effect of a sounding board, supposing the soffite were coved.

1034. How would the persons in the Gallery hear those under the Gallery?—Very indifferently.

1035. Would you recommend the Gallery to extend all round the House?—I should not recommend it to project more than I proposed; at the time I built the church at Bordesley, Dr. Tourney, of Wadham College, who examined it, said that he considered it a very good one for sound, and told me that he thought a church should be completed first, and the situation for the pulpit determined afterwards.

1036. Have you had any experience in theatres, or other buildings of this shape as to sound, so as to be able to say whether Members would be distinctly heard from different parts of the House?—I have never built any single public room of this express form; but I should consider that where extent of space is required, a speaker would be heard more distinctly by those at a distance, than in any other room of the same area, but of a different figure.

1037. In this plan you have no recommendation for additional committee-rooms?—I have contemplated 12 additional committee-rooms on two different floors, or 18 by adding another story, and these would extend towards the river; but they are not shown in the plan itself, although there is a sketch of them on a separate fly sheet.

1038. These could be built at any period?—Yes, as they do not constitute an indispensable portion of the proposed new House of Commons.

1039. At what expense could the design No. 1, without the additional committee-rooms, be erected?—At 28,000 *l.*

1040. Is that all the expense, above and below?—Yes, that includes the whole of the fitting-up of the House, and the clerks' offices underneath it.

1041. What would be the expense at which a new House of Lords and House of Commons might be erected, on an entirely new site?—That is a subject I have not considered.

1042. Do you contemplate brick or stone work?—White brick, with stone dressings for the exterior.

1043. How do you finish the inside of the walls?—With plaster called *pozzolano.*

1044. Do you prefer that to lining with wood?—Wood is undoubtedly an excellent conductor of sound; yet, as it is necessary to batten the walls, in order to apply the wainscoting, the sound is greatly absorbed by the space between the two surfaces, consequently I give the preference to the other mode, being convinced by experience that it is the best; besides which, it is the most economical in point of expense, and less dangerous in case of accident by fire. It is also my opinion that ventilators in the ceiling are injurious as regards sound, since a great part of it is thus carried off, instead of being reflected downwards.

1045. Considering the locality of the present House, with a view to its salubrity and so forth, is this a situation where you would choose to build a House of Commons?—No, it is not the situation I should select for a new House of Commons and House of Lords, with all the necessary offices, were they to be erected; but with the alterations proposed in my plan, I think that the House of Commons would be rendered as complete and convenient in every respect, considering the numerous disadvantageous circumstances that are to be contended with, and some of which are insuperable.

1046. All circumstances being the same, respecting the ground not being bought and so on, would you not choose to build a House in some other situation, as affording greater advantages than this does?—Were either a new site selected, or the present one entirely cleared of all its buildings, undoubtedly a much finer structure would then be produced, and one every way more convenient, considered as the two Houses of Parliament, and more becoming the dignity of the nation; still if the improvements are to be confined to the House of Commons, I hope the present plans will show what might be effected in regard to that alone.

Mr. *F. Goodwin.*

1 May 1833.

Jovis, 2° die Maii, 1833.

JOSEPH HUME, ESQ., IN THE CHAIR.

Rigby Wason, Esq. a Member of The House, Examined.

1047. IS there any observation you would wish to suggest to the Committee, relative to the building a new House of Commons?—Yes; I would wish to observe on two points; first, which is the most eligible site, and secondly, the best form of building. I conceive the present locality capable of being rendered more eligible than any other, sufficiently central for all beneficial purposes, and yet removed from the hurry and bustle of the most active part of the metropolis. It would only be necessary to make approaches from the northern and western parts of the town, according to the plan proposed by the Committee appointed last Session, "to inquire and report to The House, the most economical and eligible mode of improving the Approaches to The Houses of Parliament, and to the Courts of Law; and also of improving the immediate Neighbourhood of Buckingham Palace." I have been surprised to hear observations made respecting the unhealthy situation of Westminster, for I believe that upon investigation it will be found that, if properly drained, it would be the healthiest part of the metropolis. It is situated on a dry gravelly soil; whereas, the greater part of the northern part of the town is upon a cold clayey soil. If experiments were made, I do not doubt that the air would be found much drier in Westminster than in Regent's Park, although the latter is upon much higher ground. I believe there cannot be a doubt as to the reason why improvements have not taken place in the neighbourhood of Parliament; it is this: the Dean and Chapter of Westminster are the owners of the Almonry and its disgusting neighbourhood, and they lease their property for the short term of 40 years, with a power of renewal every seven or 14 years, on payment of a fine, taking as large a fine as they can procure, and a small ground-rent. Other large proprietors let their land for 60 years, take no fine but a higher ground-rent; and thus the builder has only capital to find for his business, and not for a fine also. This is an evil which cannot be remedied except by an Act of Parliament, purchasing for the Crown, by the sale of Crown-lands, the property of the Dean and Chapter of Westminster to the north of Old Pye-street; for the Dean and Chapter divide the fines as they occur, and being only tenants for life, caring nothing for their successors, it is better for them to have small fines, occurring often, than larger ones at a more distant period.

Rigby Wason, Esq. M. P.

2 May 1833.

Plans 15, 16.

1048. Have you any observations to make as to the building?—Yes; I do not think an amphitheatre is the best shape for hearing or speaking; I would prefer a circle, as affording less obstruction to sound; and I beg to lay before the Committee a plan for a new House, to be built at the eastern end of the present House. It is drawn by the architect, Mr. Bardwell, whose description of the building is as follows:

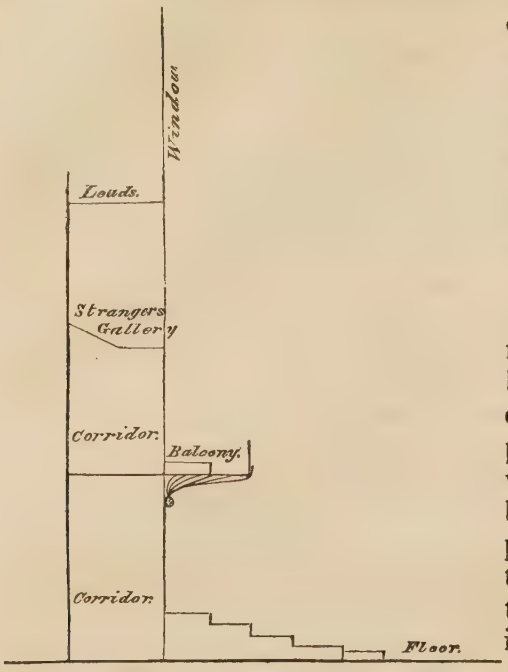
Description of a Plan for a New House of Commons.

THE accompanying plan is designed upon the principle of the ancient Chapter-house, a form which our scientific ancestors uniformly adopted for deliberative assemblies, where it was necessary that each member should deliver his sentiments from his place, sure of being heard equally well by all present.

The architect proposes to erect a building directly eastward of the present Chapel of St. Stephen, restoring the latter to its original form, and making it a noble and convenient entrance to the new edifice; the style of the new building to be in strict conformity to the Chapel, and the details to be followed with the most scrupulous exactness.

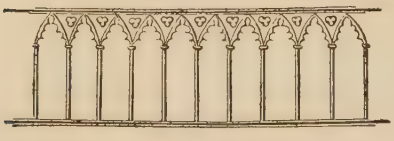
Rigby Wason, Esq. M. P.

2 May 1833.



The plan is an octagon, 63 feet diameter, encircled by a corridor, into which the 16 entrances to the House open; clustered pillars run up the angles, supporting a vaulted ceiling 52 feet above the floor; each face of the building has a window, similar to those of the Chapter-house at Salisbury, with deep mullions, so as to admit of double glazing.

Twelve feet from the floor is a balcony, with seats for 200 Members upon very full nights; beneath this balcony the House becomes a perfect circle, the angles being excluded by thin elastic boards of highly polished wood: the soffit of the balcony will form a continued elliptical sounding board around the House, (*see Diagram*), providing, upon acoustical principles, for the perfect transmission of sound, and, as the sounding board of a piano forte, will impart a richness to each voice.



The Strangers' Gallery is above the corridor, entirely around the House, exterior as it were, but opening into it by screens of tracery, like the triforium of a cathedral.—(*See Diagram*). These arches to be fitted with slides, to be opened or shut at pleasure.

A House upon this plan will seat 360 Members upon the floor, so that the balcony will be very seldom required. No noise from the Strangers' Gallery or any external noises can ever disturb the House; by drawing down the slides, strangers may be instantaneously excluded; and by the 16 vomitories every Member may leave the House in five minutes, and the air be completely renewed by the ventilators.

Double windows are provided, to secure a regulated temperature, prevent exterior sounds, insure ventilation, &c. &c. Ventilation by those windows would be perfect, and would not interfere with the voice of a speaker in any part of the House, but would rather facilitate its distribution, because the sounds would then radiate instead of being carried in a column of heated air upwards.

The cost of such a House, to be built of the best materials, but without exuberance of ornament, will be from 15,000 *l.* to 20,000 *l.*

13, Park-street, Westminster. } *William Bardwell*, Architect.
May, 1833. }

1049. Have you any other observations?—I would suggest to the Committee that the seats should be distinct from each other, and the name of the borough and Member painted at the back; permitting every Member to sit where he pleased, excepting on a division, when he should take his own place. If these seats were divided into counties, divisions might be taken in much less time than at present; Members need not leave the House; and the public would be accurately informed of the vote given by each Member present, as also of those who were absent. It would only be necessary to have printed lists, say for two counties, and let the two junior Members present, for and against the motion, fill them up, and hand them to the tellers appointed by the Speaker, who would cast up the numbers and state them, as at present. The small list would be in this form:

Counties of Suffolk and Norfolk.

	Ayes.	Noes.	Absent.
Charles Tyrrell - - -	—		
J. K. - - - - - -	- -	—	
L. M. - - - - - -	—		—
			—
TOTAL - - -	2	1	2

The

The General List would be thus:

	Ayes.	Noes.	Absent.
Suffolk and Norfolk - -	4	3	6
Cambridge and Huntingdon -	1	5	4
Kent and Essex - - - &c. &c.	3	2	5
TOTAL - -	8	10	15

These Lists might be published every Saturday by the House.

Mr. *James Savage*, called in; and Examined.

Plans 4, 5, 6.

1050. ARE you an Architect?—I am.

1051. Have you been engaged in the construction of any large buildings?—Chelsea church I built, and I built several other churches; I have lately completed some extensive buildings in the Middle Temple.

1052. Have you been made acquainted with the object which this Committee has in view, and with the questions that will be generally put to you?—I have.

1053. Are you, in consequence of that, prepared to state your deliberate opinions as to the changes that may be requisite or necessary to afford accommodation for the Members of the House of Commons?—I am.

1054. Have you examined and considered the situation of the present House, and are you of opinion that any alterations could be made in it so as to afford the accommodation that may be required?—I have examined the House, and I am perfectly satisfied no alterations can make that House at all suitable for the Members that are now required to be accommodated.

1055. Have you made yourself acquainted with the ground plan of the buildings adjoining the present House, and the vacant ground at the eastward?—I have.

1056. Are the Committee to understand that you would recommend a new House entirely to be built?—Most decidedly; among other reasons, because that will afford an opportunity of rearing the new building without making any previous alteration in the present House; that is to say, the present House will be preserved exactly as it is till the new House is entirely ready.

1057. What is the reason that you assert that it is impossible upon the present site to erect a House of Commons sufficiently large to contain all the Members; by widening the present House could you not make it accommodate the Members?—Certainly; but an alteration of that sort would in my opinion involve, looking at expense or accommodation, a gratuitous destruction of the present building; that is to say, any such alteration would amount in point of expense to as much as an entire new construction, and without the possibility of attaining the same accommodation that an entirely new building would afford.

1058. Where do you contemplate the putting the side walls, in case of an alteration of the present building?—I have not studied the details of any such plan, because I am satisfied in my mind at present that no such arrangement could be successfully accomplished.

1059. Supposing one side was extended to the Speaker's south cloister wall, and that wall was sufficient?—I am very well satisfied that the south cloister wall is by no means sufficient.

1060. Have you examined it well?—I am sufficiently acquainted with the wall to form an opinion of it.

1061. Would you venture to put a heavy wall upon that cloister wall without going down and examining what the foundation is upon which that cloister wall rests?—As far as I can be persuaded, without actually excavating it, I am decidedly satisfied that it must be a new wall under the circumstances.

1062. You know the nature of the foundations upon the bank of the river?—I do.

1063. Would you think it safe to put so important a wall as the wall of the House of Commons must be in that case upon an old foundation, without introducing artificial grouting, or something similar, so as to give a firm foundation to that northern wall of the new House of Commons?—If I did not find some such artificial

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artificial foundation already made, I should decidedly think it was necessary to put it.

1064. Do you know how many years that wall has been built?—It was built by Dr. John Chamber, the last Dean of the Collegiate Chapel of St. Stephen, in the year 1509 and 1510.

1065. Should you not think that, when looking at the cloister, the foundation must be an extremely good one?—For that building; but not for a building of the width that it would become if the present north wall of the House of Commons was removed and extended to the cloister wall.

1066. If the Committee understand you rightly, you should be afraid, supposing that the wall was carried up to the proper height, of putting on a modern roof upon that wall?—I should.

1067. Would you not be afraid of the weight of the wall itself, particularly in case it should have to rest partly upon the old foundation and partly upon a new ground, where there was previously no foundation at all?—It would be attended with a great difficulty and certainly great expense.

1068. What is the thickness of that wall?—I really do not know.

1069. In your present state of information you think it very doubtful whether it could or could not be made to answer those purposes?—So much so that I should be excessively surprised indeed to find that it was possible.

1070. Your opinion is decidedly to preserve the Chapel as it now is?—Certainly; and what I should wish, as a lover of ancient English architecture, would be to see that chapel restored as it was built by Edward 3; it would equally serve as a lobby or a library.

1071. Will you state what kind of a building you should think most eligible for a House of Commons, to hold 600 Members; and what situation you would select for that purpose?—I would place it east of the present House and a very little to the southward, so that the passage of leading communication should be in a line with the Lobby of the House of Lords. In preparing the plan, I have at the same time prepared a description of it; with the permission of the Committee I will read the description. "The situation proposed is eastward of the present House, partly on the Speaker's-garden and partly on Cotton-garden (*see* Drawing No. 4, which shows the connexion with the present House; also with the Library, and with the House of Lords). The objects aimed at, and the reasons which have guided me in the mode of obtaining them, are explained under the following heads; namely, first, the best size and shape of the House, regard being had to facility of hearing and seeing; secondly, ventilation; thirdly, warming; fourthly, lighting; fifthly, facility of ingress and egress, and separation of Members from the different classes of strangers:

"First, Size and Shape, with reference to Hearing and Seeing.—It is obvious that the smaller the House, the more easily will distinct hearing and seeing be effected. All lost space should therefore be avoided, and every accommodation that can be put without the immediate room, should be on the outside (as staircases, &c.); and for this reason I propose to seat a portion of the Members in a gallery, containing two rows of seats only; this, as also the galleries for strangers, are outside of the room or recessed, being over a corridor or passage which surrounds the House; and in order to combine all the advantages of small size with occasional extension, I propose that the openings from the galleries to the House shall be furnished with sliding shutters, so that when the galleries are not wanted, they may be closed; and as there is sufficient space in height to do this by a single shutter to each opening, it may be completely effected with the greatest ease. The plan of the House is a complete circle, which shape I have adopted because it combines advantages for seeing and hearing superior to any other. It seats the greatest number within the smallest circumference, and also brings every one nearest to a given point (collectively taken), and the extreme distance between two persons is less than in any other shape. The Speaker's Chair is placed against the wall at the east end; the seats (except the few nearest to him) are ranged in concentric circles, of which the Speaker's Chair is the centre. As the seats recede they continue to rise, and the difference of height is arranged so that (supposing the persons to be of like height when sitting) each will have one foot clear above the person before him to see and be seen by the Speaker. To accomplish this the seats must rise by a measure increasing according to the distance and the visual angle; the first difference near the Speaker being eight inches, and the last or most distant being one foot ten inches; thus all will be equally before and in sight of the

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the Speaker. The rapid rise of the seats allows great facility for seeing and hearing; it also allows more freedom of space with less distance (*see* Plan and section No. 4). By this plan it will be seen the Members are not packed over each other, as must be the case when projecting galleries are used, but are spread out on one entire area. Projecting galleries increase the general difficulties of hearing, seeing and ventilation, and it is obvious that at all events the parties over and under the galleries can neither see nor hear each other; whereas by this plan every one in the Members' Gallery will see and be seen by the Speaker, except four or five persons at the extreme end of the gallery. In the plan now submitted I have ventured to deviate from the instructions of the Committee in regard to the width of the seats from front to back, and spaced them at three feet instead of three feet four inches. The only motive for the greater width I conceive to be the convenience of Members in passing each other; which, from the numerous points of access, will not occur often or to any great extent, and therefore (as appears to me) would be ill purchased by an extension of the size of the House. Pews in churches, which require the same convenience of occasional passing, are usually made only two feet 10 inches, and that with a projecting book-board; and in the present House the width in many instances is only two feet seven inches: I therefore think three feet will be found ample. Two feet is also a large allowance in width for each sitting, the allowance in churches being but 20 inches. In a plan, dated 1739, and made by Mr. Kent, then Surveyor-general, for a new House of Commons, the space for the seats is three feet, and the allowance for each sitting one foot nine inches. This plan appears to have been approved by Mr. Speaker Onslow. The size of the House proposed in my plan is 65 feet clear diameter, and will seat, allowing two feet for each sitting, in the area 464; in the gallery, containing only two rows of seats, 106; total 570. Or, allowing 22 inches for each sitting, in the area 506; in the gallery 116; total 622. Or, allowing 20 inches for each sitting, in the area 557; in the gallery 127; total 684. Thus, when the numbers do not exceed 464, there will be in the area of a comparatively small House, the ample accommodation of two feet for each person. And in the most crowded state (namely with the attendance of the whole 658 Members) there will be, with the gallery, accommodation for 528 at 20 inches, and 130 at two feet for each sitting. I subjoin a calculation of sittings at various allowances in circular rooms of various diameters:

	65 feet diam^{r}.	60 feet diam^{r}.	52 feet diam^{r}.
Allowing two feet each sitting:			
In the area	464	360	300
In the gallery	106	98	84
Total	570	458	384
A third seat in the gallery will add	53	49	42
Total	623	507	426
Allowing 22 inches each sitting:			
In the area	506	392	328
In the gallery	116	107	93
Total	622	499	421
A third seat in the gallery will add	58	53	46
Total	680	552	467
Allowing 20 inches each sitting:			
In the area	557	432	360
In the gallery	127	117	101
Total	684	549	461
A third seat in the gallery will add	63	58	50
Total	747	607	511

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	65 feet diam^{r}.	60 feet diam^{r}.	52 feet diam^{r}.
Allowing 18 inches each sitting:			
In the area - - - - - - - -	618	480	400
In the gallery - - - - - - - -	142	130	112
Total - - -	760	610	512
A third seat in the gallery will add - - -	71	65	56
Total - - -	831	675	568

In adjusting the size of the House, in order to reduce it to its minimum, it would be desirable to fix the number for which the area must provide, leaving it to accessorial means (namely, galleries and closer packing) to provide for the overplus; because, in balancing between contending advantages, it may be observed that the convenience of 300 Members who attend 20 times in a month (multiplying the two figures) amounts to 6,000 attendances; whereas the convenience of 600 attending but once a month amounts to but 600 attendances, or one-tenth of the former. It would therefore appear that the convenience of the smaller number is of ten times the importance of the larger, as far as the means of accommodating the respective numbers may be opposed to each other. This table will give the opportunity of selecting an arrangement according to the relative importance of the different advantages they may present. Thus, if it is thought important to diminish the size of the House below 65 feet diameter, it appears that a House 60 feet diameter will seat in the area, at 20 inches each person, 432; and in the gallery, with the help of a third seat, 175, making a total of 607; and in like manner, if packed as close as 18 inches for each person, would seat a total of 675. Sound being propagated by vibrations of the air, it is obvious that that form will be best for hearing which presents the least obstruction and the most equal and uniform facility for its propagation. A circular enclosure, unobstructed by breaks and projections, is susceptible in a greater degree than any other form of the prompt and perfect conveyance of sound. The motion of water in a circular basin, is perhaps the most ready illustration of the facility with which the vibrations of a fluid are propagated by circular surfaces. Projecting galleries are therefore to be avoided, and the entire number should be seated on one area. The natural expansion of the voice in the open air, when moderately exerted, is said to be forwards 92 feet; laterally, on each side of the Speaker, 75 feet, and behind the Speaker, about 30 feet. My plan is far within these dimensions; and if a building be properly constructed and managed, it ought to facilitate and extend the power of the voice rather than impede or diminish it. Walls usually act both as conductors and reverberators of sound. It is constantly found in churches that the clergyman is heard better from the altar than from the pulpit or reading desk. This is doubtless from the wall at the back acting as a reverberator, and the side walls as conductors. In many churches the voice is heard to an extent of 130 feet and upwards in a direct line from the speaker. The length of Chelsea church, from the altar to the back of the organ gallery, is 130 feet, and the voice of the clergyman at the altar is heard very distinctly; the height is 60 feet, and with a groined vaulted ceiling of stone. The reason that many buildings fail is by large projections and angles internally which break the line of conduction and reflect the sound in various directions, not co-operating with but thwarting each other; or large and deep recesses in the walls or ceilings sometimes swallow up the sound or embay it. Of all forms the cross is the worst, as may be proved in many of the cathedral churches where the transepts are included in the choir. Hackney church is also an example of the bad effect of that form for speaking and hearing. Chladni, the last writer of eminence on acoustics, says, that a room will be favourable to sound, 1st, when it is well arranged to facilitate the natural progress of sound; 2dly, when the intensity of the sound is augmented by the resonance of other bodies, or by suitable reflections. He also says that a contemporaneous reflection will increase the intensity of the sound; that is, when the surface against which it strikes is so near that the reaction is not distinguishable from the primitive sound. He also recommends, in large buildings, in order to avoid echo, the successive rising of the seats, so that there may *not* be an extended surface against which the sound may strike at one time: but he adds, that when the space is not great, so that no one will be above 60 French feet (equal to 64 feet English) distant from

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from the speaker, the form of the room is almost indifferent, because the sound travels through the space too rapidly to have any disadvantageous reflection. The size I propose scarcely exceeds the dimension which Chladni describes as making the form a matter almost of indifference; and I take a form which (combining other advantages) is also favourable for the progress of sound. I also propose to use a material favourable, viz. a lining of wood. Wood is the material which combines the greatest number of desirable qualities as to conduction, resonance, &c. Wood does not absorb the sound so much as some materials, and that it is sonorous and capable of producing soft, clear and pleasing tones is sufficiently demonstrated by the effect of it in musical instruments. It is the constant remark that the best lining for a theatre is wood; I therefore recommend the walls to be lined with deal as high as the Members' Gallery, and to be varnished, not painted. Above that height I would leave the walls of the House (which are of stone) unlined; this will tend to conduct the sound in a horizontal direction. Sound ascends so readily that there is no doubt of the voice being well heard in the galleries. Besides injudicious form in buildings, the due sound of the voice is frequently much diminished and impaired by the impurity of the air; heated and rarified air, contaminated by noxious vapours and exhalations from the lungs, is not so elastic or capable of conveying sound as when pure and dense. It will be seen that I have made an ample provision for preserving the purity of the air by ventilation. An unobstructed freedom of space for the action of the air appears to be necessary for the formation of echo. This is deducible from the observation that a room accustomed to echo when a very few persons are in it, will sometimes not produce any sensible echo when full; and again, minute breaks on the surface of a wall prevent that unobstructed freedom of motion. Of this the lecture room of the Surgeons' College in Lincoln's-inn Fields was an example in point; when first opened it was found to have an echo, but this was effectually removed by cutting horizontal grooves in the face of the stucco round the room. The small mouldings I have introduced, both horizontally and vertically, will have a similar effect in preventing echo. Another means of preventing echo will also be found in the provision for ventilation, by which a stream of air will be constantly passing out at the apex of the ceiling. In the example of the Whispering Gallery of Saint Paul's it appears that the echo is chiefly from above, and that the surrounding plain wall, which is 17 feet high, acts as a conductor and reverberator of the sound (beneficially), for the voice is heard very well by a person on the opposite side to the speaker across the space; the echo comes at a marked interval, evidently from a greater distance, and is several times repeated. The space across the dome is 112 feet, the Whispering Gallery is 102 feet above the floor of the church, and the painted dome is 120 feet above the Whispering Gallery, and has in its centre an opening 20 feet diameter, through which the sound passes and strikes against the brick cone or second dome, about 50 feet above the painted dome, and the multiplied echoes may be accounted for by the great distance of the two domes and the break in the conduction of the sound by the large opening or eye of the lower dome, where it escapes by an explosion, and the fresh sound thus generated is again reverberated between the floor of the church (distant 222 feet) and the brick cone, distant from the floor 270 feet. There is another experiment, which may be readily repeated on Westminster Bridge: in the covered recesses opposite to each other it appears that, whether by reflection or conduction in the road, the intensity of the sound is greatly increased by the said recesses, and the sound is equally distinct in the road midway between the recesses, and it makes no difference whether the speaker and hearer have their faces towards each other and their backs to the wall, or their backs towards each other and their faces to the wall of the niche they respectively stand in; these niches are about 60 feet distant, and not the slightest distinction of primitive sound and reverberation can be detected in any position. In the plan I submit the form is favourable to the progress of sound, the materials are favourable to resonance and conduction, and the greatest dimension is too near for echo. There is therefore every reason to expect the greatest facility for speaking and hearing.

"Secondly, Ventilation.—The object of greatest importance is to preserve the air pure and wholesome. In order to do this the ventilation must be continual. The noxious gases should be expelled as soon as generated; ventilation should be from the very apex of the room, for the quality of the air is not improved by allowing any to escape at any place much below the highest level, and fresh air should not enter where it is in any degree liable to mix with

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with that which has risen from the lungs. The noxious vapours being of increased temperature, and lighter than air, ascend, and readily escape if allowed to do so; but if not allowed to escape while its increased temperature gives it the proper degree of buoyancy, it will cool and mix with the air of the room. The domical form of the ceiling is most favourable for ventilation, but there should be the means of opening and closing the aperture so as to regulate the quantity of ventilation at pleasure. This arrangement is easily effected by the suspended plate being balanced by a weight; the weight, or a portion of it, and the line for motion, being accessible below. This power of regulation is necessary, because if the air admitted below is not sufficient to supply the area of exit above, a downward current of air takes place. Fresh air should be admitted in or near the floor by flues through the external walls; the entrance to the flues being at a considerable height above the ground, to avoid the vapours near the surface of the earth, which are sometimes damp or noxious. These flues should be on every side of the building, so that they will act with the wind in any direction; they should be numerous, and further subdivided into small portions under the floor, and the openings guarded by wire-gauze. There will then be no sensible current, but a regular and constant change of air and ventilation will be effected. These flues should also have registers to open or close, so as to be regulated at pleasure. The building is proposed to be lofty, because if low it occasions a closeness which no ventilation will completely remedy. Ventilation is most difficult to maintain in close, still and gloomy weather; but from the great difference of level between the place of entrance for the pure air and the place of exit for the heated or foul air, and the unobstructed freedom with which the latter will be allowed to rise and escape, no doubt can remain but the ventilation will be perfect. When the House is not occupied, it will be easy to cause a strong blow through the building by opening all the windows and doors and ventilators, and at all times the height of the House will afford a great bulk of air to breathe in.

"Thirdly, Warming.—Warmth increases the exhalation of every species of noxious matter; therefore it is in every point of view desirable that the temperature should be kept as low as possible, consistent with comfort; and where artificial warmth is required, it will be best attained by making every thing about the room warm, and preserving the air cool. This arrangement is at once the most healthy and the most pleasant. Nothing is more agreeable than to have every thing about you to feel warm, and at the same time to breathe a cool atmosphere. We never feel heat oppressive or injurious till the air becomes hot. The best method therefore of warming the building will be to warm the floor itself by means of flues, as was practised among the ancient Romans, and described by Vitruvius. I propose to build the basement and floor solid, leaving only the flues for warming. This mass will thereby be always dry, and will preserve a great equality of temperature. It will be comparatively cool in summer and warm in winter. It will also be very easily and certainly warmed by smoke flues. These flues should be made of fire-stone and not of brick, because bricks contain sulphureous matter, which sublimes at a low temperature; they are also liable to open at the joints from the expansion of the heated air in the flues, and which very frequently breaks the solid bricks. Through the fissures thus caused the noxious gaseous matter and vapour from the fuel makes its way, and the air becomes contaminated. Firestone is not liable to these accidents, but is always sweet and wholesome. This mode of warming will not interfere with the mode of ventilation, but will leave that quite perfect and manageable. It may be reasonably expected that this warmth will be quite sufficient when it is considered that the building will be entirely free from damp and also from currents of cold air; nevertheless, if any additional warmth should be required, it will be easy to add it by a separate arrangement of pipes, either for steam or hot water, which pipes may be placed under the seats, and this without interfering with the other parts of the system of warming the floor or ventilating the room. A considerable space is introduced between the ceiling and the external roof. This will materially tend to preserve the equality of temperature, it will keep out the heat in summer, and prevent the cooling effect of the atmosphere in winter. For the purpose of more effectually preserving the interior from damp and the cold consequent therefrom, it will be right that the external walls should be faced with stone, which is less pervious to moisture than brick, which absorbs it very readily in damp and rainy weather; and where dryness is of consequence, bricks should be employed as little as possible, unless where they can be protected from moisture. The sashes will be double, because the loss of the heat by glass when not double

is

is very great, and the cooling of the air in this way does not at all improve it, but prevents the ready escape of the noxious vapours, and allows them to descend and mix with the air of the room again.

" Fourthly, Lighting.—An elevated position for the admission of the light is the most agreeable and useful, as the light is then thrown upon the objects to be seen, while the eye of the beholder is not annoyed; when the light is nearly level with and in front of him, it is dazzling to the eye: the elevated position gives a longer stream of light and a fuller effect of the incidental rays. A skylight is objectionable, as the light is thereby liable to be affected by every passing cloud and obscured by snow, and to occasion interruption by the noise of hail or heavy rain. The external windows are therefore in the upright face of the wall, and are placed so as to allow a direct ray of atmospheric light to strike upon every part of the interior of the room; this is very desirable, as the invigorating influence of an abundant supply of light is well known. The effect of the rays of the sun for drying, warming and ventilating a room is so beneficial that it should be always secured if possible, and if at any time it be found unpleasant or inconvenient, a temporary blind is easily applied to exclude it. The prevailing tone of colour should be one reflecting much light, the room will thereby be always more cheerful, and it will render a smaller quantity of artificial light necessary, which is known to diminish the purity of the atmosphere and greatly increase the heat. I have already recommended that the wood linings be of deal, preserving the natural colour and varnished, as preferable to painting.

" Fifthly, Ingress and Egress, and separation of Members from Strangers.—The Library of the House of Commons and the floor of the House of Lords being nearly level, differing only 5 ½ inches, I propose that the floor of the new House shall be at the same level with the Library, and as the 5½ inches may be got over imperceptibly by an inclined plane, that may be all considered as on the same level; and, in order to facilitate the communication between all these, I propose to make a new passage from the Lobby at the north end of the House of Lords, leading direct to the principal entrance of the new House of Commons, with a transverse passage leading to the Library and the present House of Commons; and in order to make the communication complete, it will be necessary to raise the floor of the Long Gallery to the same level (it is now 3 feet 9 inches below). The line of general approach will thus be from the present lower Lobby, and is marked by a dotted line on the Plan No. 1. The present House of Commons will make a most convenient Lobby for Members; it is 3 feet 3 inches above the Library, but this difference of level will not be deemed important when put in competition with the facility of communication with the House of Lords and the Library, and especially when it is considered that it will so far meet the communication with the upper seats of the new House, a staircase of communication between these being provided in the Plan (*see* No. 4). The rapid rise of the seats allows the principal entrance to be advanced near to the middle of the House, and in order to facilitate the access to the upper seats, staircases are made immediately on entering the House, to lead thereto. There are also two passages between the seats from the floor to the top. There are also vomitories from the ends of the seats into a corridor, which corridor is exclusively for the use of the Members, and only accessible from the inside of the House, or from two doors marked (D. D. on the Plan), and which may be only opened occasionally, at least, under control. The staircases to the upper seats are also continued to the Members' Gallery. The galleries are all recessed. The Gallery for Peers is approached by a staircase in the Lobby, on the south side; it is divided in two by a small retiring-room in the centre, which prevents the necessity of piercing the wall immediately over the Speaker's platform. The seats will hold, allowing two feet each, 56 persons in two rows, besides a clear passage behind the seats. It will be seen by the section, that the Peers' Gallery is only 10 feet above the floor of the House; the continued rising of the seats prevents its being continued further over the corridor. Over the Peers' Gallery is the gallery for the reporters, which is approached by a staircase on the south side of the House; it is in plan the same as the Peers' Gallery, and will seat 56 persons, in two rows, allowing two feet each, besides a clear passage behind, and has a small retiring-room in the centre. The Strangers' Gallery is over the last, and is intended to run all round the House, and will seat about 180; it is approached by a staircase in the Lobby, on the south side; the Lobby on the north side of the House being exclusively for Members. It will be seen that the galleries are all totally independent of each other,

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other, and incapable of intercommunication, and can only be approached by their respective staircases, each of which has its separate entrance, and can be completely controlled. It will also be seen, that the Members in the House have a very free intercommunication with every part, including their gallery: this is very perfectly effected by means of the vomitories at the ends of the seats, communicating with the corridor. Neither can any part of the House or these passages be intruded upon by strangers, being only approachable by the main entrance to the floor of the House, or by two entrances to the corridor, (marked D D, on the Plan) or by the present House of Commons, which is intended to serve as a retiring Lobby for Members only, and will be safe from the intrusion of strangers. From the staircase to the Members' Gallery also a passage may be made, if required, to the upper floor of the Library. As connected with ingress and egress, I submit a plan for an entrance in the east or river front of the House, which I think would be attended with considerable convenience: this is supposing an approach-road may be formed from New Palace Yard, or from St. Stephen's Court; the road might rise by an inclined plane to the portico-entrance, and an entrance might also be made by an archway under the portico, by means of which carriages might set down and take up under cover: a staircase of communication to the Members' Corridor is provided therefrom, and which might be further continued to the Peers' Gallery: servants' waiting-rooms might also be conveniently obtained in the basement, and carriages might wait in Cotton-garden, where provision might be made for their shelter."

1072. What is the advantage of the site you have now chosen over that in a straight line due east?—I do not know that there is any advantage excepting this, that with the new building you need not obscure the windows of the present House.

1073. Do you see any objection to place your building due east of the present House, instead of the position you have chosen?—I see no difficulty in it.

1074. Would it not be more convenient to have the new House on a level with the old House, the communication being daily and hourly, instead of on a level with the House of Lords, the communication with which is only occasional?—Perhaps it might.

1075. Have you considered, in choosing this site, whether you could build committee-rooms on either side, if such should be necessary, for having the rooms for Committees nearer the House than they are at present?—It could be done with the greatest facility, the corridor allowing that communication.

1076. On which side?—Either north or south.

1077. At any time and on any plan, according to its extent?—Yes.

1078. In case you placed your House due east, would you not convert the present House of Commons into a Lobby-room?—Certainly. It appeared to me that it was very desirable to have a Lobby for strangers to wait in, immediately contiguous to the entrance of the House: that circumstance weighed with me in this arrangement; but if placed due east, and the present House become a retiring Lobby for Members only, the Lobby for strangers might be as at present.

1079. Might not the access to the Strangers' Gallery be made by a passage in the basement, leading immediately underneath Mr. Ley's house?—Undoubtedly.

1080. What is the interval, according to this plan, between the bank of the river and the wall of the New House?—It is about 60 feet.

1081. So that if it were required to increase the width of the House, the Lobby of the House might be advanced, without inconvenience, nearer the river?—Undoubtedly.

1082. What is the proposed height of the new building from the floor of the House?—Fifty-six feet at the ceiling.

1083. Do you propose the ceiling to be level?—Not quite level, only giving it such a rise as to facilitate the ventilation; rising in a straight line two feet to the centre.

1084. Will not that great height take away from the distinctness and clearness of the sound?—I think not, decidedly.

1085. On your theory no returning echo can take place within 60 feet; the sound is not reverberated?—Generally not; it is sometimes; but the cause of it I believe has not been ascertained, and I am not aware of its ever having occurred but under a dome.

1086. Are there any examples of buildings purely circular, like your plan, where

it has been tried how far echo exists?—Some of the theatres have a large portion of a circle.

1087. Do you not think that the deal lining to the body of the House up to the gallery would rather encourage echo than otherwise?—I think not; I think that echo is rather produced by the interruption of the conducting matter; that the line of conduction must be interrupted very decidedly in order to produce echo.

1088. From the back seat to the top of the gallery how many feet are there?—It is 21 feet 6 from the floor of the House to the floor of the gallery.

1089. What height will the first gallery be?—The first gallery is 10 feet.

1090. That contains two seats?—Yes.

1091. How high do they rise?—The difference is two feet between them.

1092. Would the Members in those galleries see the Speaker?—They would; the arrangement of the rise of those seats is made, as in all the others, to give to each person one foot of clear vision above the person before him.

1093. All the front of that gallery you propose to be of stone?—Yes.

1094. How deep does the gallery recede?—Eight feet.

1095. What is the diameter of the pillars?—They are 18 inches deep and 12 inches wide.

1096. What is the height of the space from opening to opening in the wall?—About four feet.

1097. What is your object in making the back benches rise by greater intervals than the lower benches?—The principle on which they all rise is that each person shall have one foot clear space of vision above the person before him, and in order to this, it will be seen, by drawing a line from the eye of the person, when seated, to the Speaker's eye, that below the level of the Speaker a less rise than one foot will still give the measure of a foot between the two lines. Whereas above the level of the Speaker's eye the measure must increase by all the difference that the line of vision rises in the space of the seats; and the higher they rise in progression, and the more they recede from the Speaker, the greater is the rise necessary to give that foot of clear space for vision.

1098. Do not you consider that those deep recesses in the galleries of eight feet would very much interfere with the sound generally in the House?—I do not think that they would, because I think there is in the wall sufficient surface of matter to conduct the sound, that the vacancies would not interrupt it.

1099. Do you propose, when the number of Members is not sufficient to fill both the body and the gallery, to close the entrances to the gallery?—It is more for the sake of the House being smaller and snugger, than any apprehension that there would be a deficiency of sound.

1100. How do you propose to shut that up?—By falling shutters I had intended completely to close them.

1101. From the Members' Gallery what distance have you to the Strangers' Gallery?—The Strangers' Gallery is immediately above; the space between the ceiling of the one and the floor of the other is only about nine inches, and the Strangers' Gallery has also a height of nine feet.

1102. According to your plan the floor of the Strangers' Gallery would be 33 feet high from the floor of the House?—It would.

1103. How many sittings do you give in the Strangers' Gallery?—About 180.

1104. You say that this floor is 19 feet high; a man standing there of an ordinary height, his head would be 24 feet from the floor; do you not think that with an ascending stream of air there would be great difficulty in forcing the voice downwards?—It does not appear so; by experiments of Mr. Saunders, he found that a very strong current of air made no difference in the communication of sound. The fact is, that a very rapid stream of air bears a very small proportion indeed to the rapidity of the propagation of sound, so much so that a current of air has no effect upon that impulse which is given to the air by the human voice; but much louder sounds, such as cannon or ringing of church bells, or other very great sounds which move a large body of air, are certainly affected by currents of air.

1105. Where do you place the Peers?—In the first gallery, behind the Speaker, entering by a different door, and their gallery is carried as far as the rising seats of the House will allow it to be carried.

1106. Is there any instance to which you can direct the attention of the Committee of a circular building where the effect of sound has been fairly tried?—I am not at present able to answer that; I think, generally speaking, where echoes are heard, it depends, as I said before, upon the interruption of the sound, which allows

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allows a new sound to be generated and to be reverberated in the same sort of way as I have attempted to account for the echo at St. Paul's.

1107. You have no fear as to the hearing being, by the shape of the building, distinct?—I am as positive of it as I can be of any shape whatever; I should be no more positive of a square building than I should be of this, for I have known square buildings have an echo and reverberation.

1108. You state that the base of this House will be solid masonry?—Yes.

1109. You do not then provide for any rooms underneath?—I should recommend not to have any rooms underneath further than under the corridor.

1110. You would not employ the area underneath the building for offices?—I think that it would be advisable not.

1111. Upon what ground?—I think that you cannot get so good a means of warming or ventilating if you put other rooms underneath; in addition to that, I think that the rooms themselves would be very inconvenient and would hardly get proper light to them, or access.

1112. Have you made any estimate of what the expense of the round building alone on your plan would be?—I estimate the building of the House, with the Lobbies as they are coloured, at 26,700 *l.*

1113. Does that include the inside of the House?—It includes all the fitting in the inside of the House; it does not include the portico entrance.

1114. It completes the seats, and every thing?—Yes.

1115. But the additional portico or new entry from the river side is not included in that?—No.

1116. What would that be?—I suppose it might be about 6,000 *l.*; I have not made any detailed estimate of it.

1117. That is shown by the Plan No. 5?—Yes.

1118. Is it to be stone or brick?—Stone.

1119. Bath stone?—No, not Bath stone. I have no objection to Bath stone, but there is a general opinion in preference of harder stone.

1120. What do you propose to face the outside of the building with?- With Portland stone.

1121. Will the estimate you have given cover that?—Most decidedly.

1122. Looking to the ultimate convenience and arrangement of business, you would, of course, prefer building a new House of Lords also?—There would be, I apprehend, no difficulty in doing that further to the south, and that is one accidental advantage of bringing the building out.

1123. How long would you be in finishing that building, fit to be occupied?—It might, if it was an object to press it for time, be done in nine months.

1124. In what time would you recommend it to be done?—I should prefer 15 or 18 months.

1125. You have mentioned a plan by Mr. Kent, submitted to Speaker Onslow in 1739, will you have the goodness to show the Committee that plan?—[*The Witness produced the same*, No. 6.] This is the plan referred to as the one most approved by the Speaker; there is a copy of the letter accompanying the plan, reciting that that is the one most approved by Speaker Onslow.

Mr. *Adam Lee* called in; and Examined.

Mr. *Adam Lee.*

Plans 8, 9.

1126. IN what situation have you been?—I was for 26 years Labourer in Trust to the Houses of Parliament and Speaker's house; labourer in trust meaning Clerk of the Works, to prepare drawings and superintend the works under the late Office of Works. I have been removed within the last 12 months from the Houses of Parliament to the Horse Guards and Whitehall Departments. I had that appointment under the office of Woods and Forests.

1127. Are you well acquainted with all the buildings connected with the House of Commons?—Certainly.

1128. Have you ever been employed to make plans for the building of a new House of Commons?—I have made plans, but I have not been employed officially for that purpose.

1129. For what purpose have you made them?—For my own amusement.

1130. Are you prepared to submit to the Committee any of these plans?—I have one of those sets of plans that I made about 10 years ago, and I have another that I presumed to make within the last three months.

1131. Will

1131. Will you have the goodness to show the Committee those plans, and give your views on the subject?—

[*The Witness produced a Plan.*]

1132. Where would you propose to place the new House?—Upon the site of ground where Mr. Ley's house and garden now stand.

1133. East of the space between the old House and the Library?—Yes.

1134. Do you propose to take down Mr. Dorington's office and Mr. Ley's house?—Yes.

1135. How would you approach to such a House?—The approach would be the same as it is at present until you come to the porch of St. Stephen's Chapel.

1136. That is near the Long Gallery?—Yes; then I propose from there to go across the room that is used for the hanging great coats, into the end of the Long Gallery; then by taking part of the Ingrossing-office as a passage, that would bring you into the proposed Lobby.

1137. Being that space between the old House and the Library?—Yes.

1138. From that you proceed eastward?—Yes, into the House of Commons; then after passing the strangers' seats I should turn to the right into the present Library, or otherwise go to a passage which would lead round to the back of the seats.

1139. Do you mean that passage to be in the House, or a passage separated from the House by a wall or corridor?—It would be separated by a partition from the seats up to the Gallery.

1140. You propose the same shaped House as the old House?—Yes, just the same.

1141. What dimensions?—The length is 80 feet within the walls.

1142. From the outer door to the back of the passage?—Yes, behind the Speaker's Chair.

1143. What is the width?—The width is 58 feet 6 inches; that is within the walls as well, including the passage.

1144. Then the extreme length includes the passage also?—Yes, from wall to wall.

1145. What has induced you to prefer the present arrangement of the situation of the benches, and the Speaker's Chair, in all respects to any other?—I was induced to do that conformably to the old House, not having heard a complaint of its being an inconvenient form.

1146. Do you not think that having so large a proportion of sitting-room behind the Speaker, and out of his sight, is very inconvenient and leads to noise?—I have always thought so.

1147. Could not that be remedied by removing the Speaker's Chair back?—Then some of the Members would be sitting with their back to the Speaker.

1148. The principal alterations that you would make then, would be the enlargement of the dimensions, and having a passage all round the House, leaving in other respects the arrangements as they are at present?—Very much so; the fitting up of the House is a matter of detail, I presume, afterwards.

1149. Do you propose underneath that to have any rooms; to reserve the area underneath for rooms?—Yes; I propose by the ground plan, six rooms in the basement; committee-rooms or clerks' offices; those rooms would be about 20 feet wide by 30 long, 14 high.

1150. What height would you propose to have the House?—The height is 45 feet from the floor to the centre of the ceiling.

1151. Would you propose a flat ceiling?—A flat ceiling, with the exception of coves coming down upon the wall five feet, and on the ceiling about the same width.

1152. What are the seats behind the Speaker, which appear in the plan?—These are gallery seats for the Members.

1153. Projecting over two seats of the body of the House?—Yes.

1154. Do you propose a gallery to go the whole way round?—Entirely round the House.

1155. What width have you given for the seats from back to front?—Three feet and two inches.

1156. Do you propose to find seats for Peers and for persons admitted by the Speaker's orders under the Strangers' Gallery?—Yes, as at present, only so much larger as the House would admit of by its width.

 1157. And

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1157. And the Strangers' Gallery, in the same manner, you propose to be over the entrance of the House?—Just the same as at present.

1158. How far do you propose the Gallery to project into the House?—To project nine feet, that is, three widths of seats.

1159. Do you not consider that that would interfere with the sound very much?—I consider the sound would be very much improved by having the Gallery projecting in that manner.

1160. What sitting room do you allow for each Member?—Two feet by three, from back to front of the seats.

1161. What is the total number of seats in the body of the House and in the Galleries?—The number of sittings in the body of the House is 364, and in the Gallery 210, making together 574. The number of sittings for strangers under the Gallery 88, and in the Strangers' Gallery 150.

1162. Have you made any estimate of what the expense of that would be?—I have not gone into the estimates in detail altogether; I have made it as architects do in general, by the square.

1163. Can you state a sum that it would not exceed?—I think that it would not exceed 20,000 *l.*

1164. That would finish the whole?—The whole that you see on this plan; the cutting away and making good and finishing the work.

1165. What is the size of your Lobby?—The length of the Lobby is 43 feet, the width 35 feet, height 20 feet.

1166. You are of opinion then that an inconvenience attends placing so many Members behind the Speaker?—Certainly.

1167. And your reason for adopting that plan is, because such is the plan of the present House, and you conceive experience may have proved that to be the most convenient?—I have always thought, that if the Speaker was placed further back in the House, the distance would be so great for the Members speaking from the further end, 75 feet or thereabout, that it might be an objection.

Martis, 7° die Maii, 1833.

JOSEPH HUME, ESQ., IN THE CHAIR.

Mr. *Francis Goodwin,* Architect, called in; and further Examined.

Mr. *Francis Goodwin.*

7 May 1833.

Plans 12, 13, 14.

1168. DO you wish to make any addition to your former evidence?—I beg to submit to the consideration of the Committee a plan which I trust will be found to embrace all the essential points to be attended to in the erection of a new House of Commons. Among these a very important one is to effect the greatest possible concentration of space in the House itself, so that the voice shall be distinctly heard by those who may be most remote from the Member who is speaking; at the same time preserving a space not less in width than three feet three inches by two feet, for sitting for each individual, and providing as free an access as possible to each seat, in order to obviate confusion and inconvenience. The form as proposed by me for the House would be what is familiarly termed the horse-shoe form, its greatest extent as to breadth being only 65 feet, and the length of the body of the House 66 feet 6 inches, or, including the receding galleries for the Peers, and those for the Press and for Strangers, the extreme dimensions would become 65 feet by 85 feet. In placing these galleries, care has been taken to form them so as not only to afford commodious sittings, but so that the persons who occupy them shall be able to hear distinctly all that is said by the Members; and I feel convinced that in a room of this shape and these dimensions, the voice would be distinctly conveyed to the remotest points from the person speaking; and in order to accomplish this more effectually, the galleries for the Members have recessed seats with niche heads, by which means the sound would be considerably reflected. The only variation I have introduced in the design marked No. 3, from that specified as No. 2, is that I have appropriated the whole of the present Lobby and present House of Commons as Lobby to the new House; that is, I have suggested the idea of restoring St. Stephen's Chapel, so as to render it a beautiful and appropriate feature

Mr. *Francis Goodwin.*

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feature in the interior, and at the same time to render the whole as commodious as possible. Neither would this be attended with anything like a proportionate increase of expense, as nearly all that is requisite would be to pull down and remove, rather than to construct, the shell of the ancient fabric being perfect, with the exception of the roof, which would have to be restored, so as to assimilate with the rest. According to this last plan, too, the area of the House itself would be considerably contracted. The entrance for the Members, the Committee-rooms, the Clerks'-offices, and the Lobby for the Public, remain the same as in design No. 2; the last of these it is proposed to form in the space beneath the floor of the present Lobby and House of Commons.

The sitting-room in the body of the House, for - - - - - -	402
in the Galleries - - - - - - - -	198
	600

Allowing for such sitting-room for each 3 feet 3 inches by 2 feet.

If it should be thought preferable to have the strangers in front of the Speaker, and at the back of the Members in the round of the horse-shoe, a gallery can be easily placed there, with one or two seats retiring, capable of affording accommodation for 150 to 200 persons, which will enable me to shorten the House to the eastward at least 10 feet, and considerably reduce the expense of the building. The Peers would remain behind the Speaker, on a level with the seats of the Members; and the reporters in a gallery behind or over them. I do not think the gallery for strangers will affect the hearing, whilst the contraction in the length of the House will in all probability improve the general hearing.

I submit the following as a corrected Estimate of the expense attending the execution of design No. 3, pointing out the expense of each separate part, which may be erected, if required, at different times, after the House shall be built.

ESTIMATE.

	£.
1. The new House of Commons, and Dining-room underneath for The Speaker - - - - - - - - - - - -	26,000
2. Fitting up the Dining-room - - - - - - - -	1,000
3. New approach to the House, &c. &c. - - - - - - -	7,000
4. Restoration of St. Stephen's Chapel, side Aisles, new Ceiling and Roof - - - - - - - - - - - - -	9,000
5. The new Library, Clerks'-offices, and 15 new Committee-rooms -	18,000
£.	61,000

Jovis, 9° die Maii, 1833.

JOSEPH HUME, ESQ. IN THE CHAIR.

Mr. *Thomas Hopper,* called in; and further Examined.

Mr. *T. Hopper.*

9 May 1833.

Plan 22.

1169. HAVE you anything to offer, in addition to the evidence which you have given, as to the practicability of building a House on the site of the present House of Commons?—I beg to say that I have examined the Plan which was presented to the Committee by an Honourable Member, Mr. Hanbury Tracy, and that plan appears to me to possess many great advantages, and I see no objection to it. I believe the present House of Commons could be altered into such a shape as the Committee might consider most convenient. In addition, I would state that a Lobby might be made where Mr. Ley's house now stands, the removal of which I had not contemplated in the evidence I have previously given.

Mr. *James Savage*.

9 May 1833.

Plan 6.

Mr. *James Savage* was again called in, and having delivered in a Copy of the Letter, No. 2, from the Office of Works, dated 11th December 1739, which accompanied a Plan of a new House of Commons, of which a Copy is annexed; the Committee applied to the Treasury to obtain a Copy of the Correspondence which passed at the time between the Treasury and the Board of Works respecting the building a new House of Commons, and which was alluded to in the above Letter; but the Letter No. 1, is all that the Treasury can furnish.

[*The above Papers, Nos.* 1, 2 & 3, *were delivered in and read, and are as follow:*]

—No. 1.—

COPY of Letter from the Treasury to the Board of Works, dated 5th September 1739.

Gentlemen,

THE Lords Commissioners of His Majesty's Treasury are pleased to direct you to wait on the Speaker of the House of Commons with the several Designs prepared by you for a new House of Commons, in case the same be erected, and to consult thereupon and agree with Mr. Speaker the Design or Plan which shall in your opinions be thought best to be executed, and to let their Lordships know your determination herein, to the end necessary orders may be given for providing materials and making contracts for carrying on the said work.

I am, Gentlemen,
Your obedient Servant,

(signed) *J. Scrope.*

—No. 2.—

To the Right Honourable the Lords Commissioners of His Majesty's Treasury.

May it please your Lordships,

IN pursuance of your Lordships' directions, signified to us by Mr. Scrope, the 5th of September 1739, we have waited on The Speaker of the House of Commons, and showed him the general Designs we had prepared for the reception of Parliament, and likewise several Designs for a House of Commons, and took his opinion thereon.

We have made such alterations as he desired, and prepared the Plan marked (D), together with a new General Plan, both which we herewith send your Lordships.

The aforesaid Plan, marked (D), is, in The Speaker's opinion (and we likewise agree in the same opinion), the most convenient.

He likewise approves of chambers and other accommodations adjoining to the House of Commons, as expressed in the General Plan; but as to the rest of the General Plan, or the elevations of any part of it, he desires to be excused giving any opinion.

By this alteration the building is enlarged and carried further into the Thames; and upon the nearest computation, we find the charge of as much as relates to a new House of Commons, will amount to the sum of 55,707*l.*

The charge of as much as relates to the House of Lords, with Vestibule, Conference Room and Portico, to the sum of 80,400*l.*

And the charge of Arcade, Court of Request, &c., to the sum of 34,960*l.*

The whole amounting to the sum of 171,067*l.*

The Courts of Judicature and passage of communication expressed in the General Plan before your Lordships, will amount to the sum of 85,000*l.*

All which is most humbly submitted by

Whitehall, Office of Works, Dec. 11, 1739.

H. Fox, *Wm. Kent*, *Thos. Ripley*, *Westby Gill.*

(A Copy)

Joseph Hume, Chairman.
May 9, 1833.

No. 3.

Mr. *James Savage.*

9 May 1833.

— No. 3. —

The Dimensions of the present and proposed House of Commons, marked (D.) 2.

	Present House of Commons.	Proposed House of Commons.
	Ft. In.	*Ft. In.*
The Room in breadth	32 4	58 –
The length of the Room	60 8	65 –
From the front to the centre of Sweep		36 –
The height of the Room	26 8	36 –
From the floor to the upper side of Gallery	13 6	20 –
The diameter of the Middle Flat	10 8	11 6
From The Speaker's Chair to the Bar	30 –	28 –
From middle gangway to angle near the Chair, lower Seat	13 –	16 –
The breadth of the Seats	1 1	1 4
The footway between the Seats	1 8	1 8
Which make the Seats from back to back	2 9	3 –
With the same ease the present House contains	420	720
That is the body	300	500 *
In the Gallery	120	220 †
The greatest extent from The Speaker's Chair	49 –	50 –

* This number allows one foot nine inches for each sitting.

† There is an error in this number. One row of seats in the Gallery, allowing one foot nine inches or each person, will seat only 120.

James Savage.

LIST OF PLANS.

1. PLAN of the Houses of Parliament, Westminster-hall, and the adjacent Public Buildings - - - - - - - - - - Sir *John Soane*, architect.
2. Plan of the House of Commons, and of the surrounding Offices, as at present arranged - - - - - - - - - - *Benjamin Wyatt*, architect.
3. Plan and Design of a New House of Commons - - Sir *John Soane*, architect.
4. Design for a New Building for the House of Commons - *James Savage*, architect.
5. Elevation of the East Front next the River - - - *James Savage*, architect.
6. Copy of a Plan for a New House of Commons, by the late *Wm. Kent*, architect, dated 1739.
7. Plan - - - - - - - - - - - - *John Deering*, architect.
8. Principal Plan of a proposed New House of Commons - Mr. *Adam Lee*.
9. A Perspective View - - - - - - - - - ibid.
10. Plan of Proposed House of Commons - - - - *Edward Blore*, architect.
11. Design for a New House of Commons - - - - Right Hon. *J. W. Croker*.
12. Design for a House of Commons - - - - *Francis Goodwin*, architect.
13. Longitudinal and Sectional Perspective Views - - ibid.

13B. Sectional Perspective View - - - - - - ibid.

14. Perspective Views - - - - - - - - ibid.
15. Plan for a New House of Commons - - - - *Rigby Wason*, Esq., M. P.
16. Section of Ditto - - - - - - - - ibid.
17. Plan of a New House of Commons - - - - *Decimus Burton*, architect.
18. Plan and Longitudinal Sections - - - - - ibid.
19. Plan of the present House of Lords and Commons, with a Plan and Section for a New House of Commons, and other Buildings - - - *George Basevi*, architect.
20. Design for a New House of Commons - - - - Sir *Jeffry Wyatville*.
21. Design for a New House of Commons - - - - *Geo. Allen*, architect.
22. Plans of the present House of Commons, and proposed Alterations - - - - - - - - - *Hanbury Tracy*, Esq. M. P.

PLAN OF THE HOUSES OF PARLIAMENT WESTMINSTER HALL, and the adjacent Public Buildings.

John Soane Arch.t
Lincolns Inn Fields, 22nd March 1833.

OLD PALACE YARD

NEW PALACE YARD

THE RIVER THAMES

Part of Westminster Bridge.

Rooms belonging to the House of Lords.

HIS MAJESTY'S Robing Room.

THE HOUSE of LORDS.

93.0 THE LONG GALLERY.

55.4

THE PAINTED CHAMBER

THE KING'S GALLERY

HOUSE OF COMMONS LIBRARY. 30.0 91.0 63.10

Mr LEY'S HOUSE

60.6

COMMITTEE ROOMS.

127.0

125.0

61.3

70.0

Committee Room. N.o 12

Comittee Room N.o 13.

Committee Room N.o 14.

Committee Room N.o 11.

Staircase

Servants waiting Room

WESTMINSTER HALL.

Outer Lobby

Lobby

Chaplain

Clerks Office

32.8

THE HOUSE OF COMMONS. 81.0

THE SPEAKER'S HOUSE

131.3

Gateway

ST STEPHEN'S COURT

Gateway

EXCHEQUER OFFICES.

The Speaker's Coach Houses and Stables.

THE SPEAKER'S GARDEN.

139.0

115.6

272.0

Scale of 100 50 0 100 Feet.

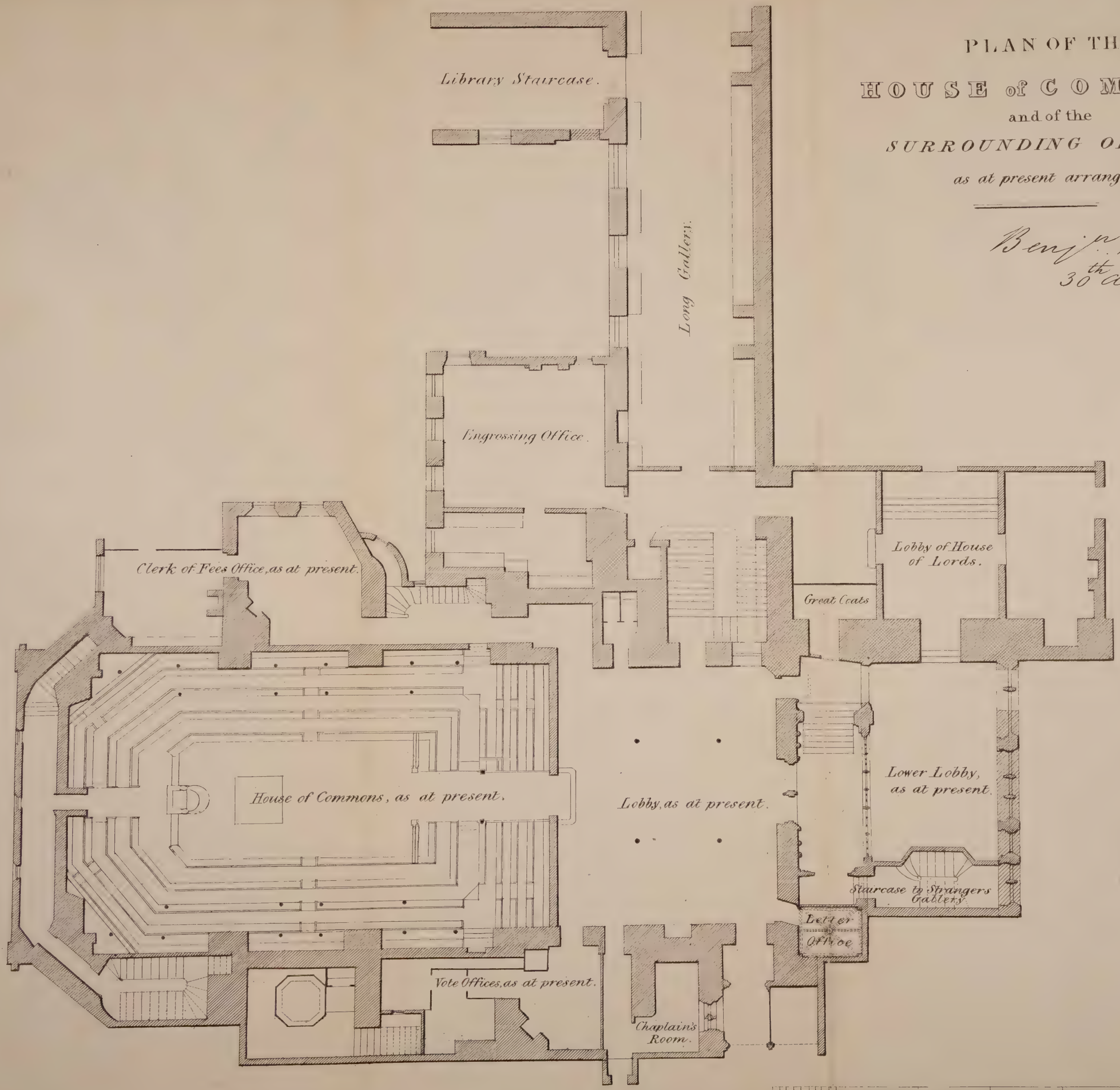
James & Luke G Hansard & Sons Printers.

269. Ordered, by the House of Commons, to be Printed, 13th May 1833.

J Basire Lith

PLAN OF THE
HOUSE of COMMONS,
and of the
SURROUNDING OFFICES.
as at present arranged.

Benj.ⁿ Wyatt
30th Augᵗ 1831.



269. Ordered, by the House of Commons, to be Printed 13th May 1833.

James Basire Lith

James & Luke G Hansard & Sons, Printers

Old Palace Yard.

Member's Entrance.

Waiting Room.

Servant's Waiting Room.

Westminster Hall.

Outer Lobby.

Lobby.

St. Stephen's Chapel or Ante-Room to the New House of Commons

Part of the Speaker's House.

Engrossing Office

The House of Lords.

The Long Gallery.

Mr Ley's House.

Library.

His Majesty's Robing Room.

The Painted Chamber.

Passage from Cotton Garn.ds to the Stranger's and Reporters Gallery.

Corridor

Corridor

Corridor

Projection of Gallery

The House of Commons

75 ft 0 in 29 ft 0 in

F

E

E

E

D

Entrance to the Strangers Gallery

The dotted line, shows the increase that will be necessary in the dimensions of the Building if a Gallery is not permitted in the House for the accomodation of part of the members.

No. 3.

Section on the line a.b. Design

THE RIVER THAMES.

References.

A. Staircase to the Offices of the Clerk of the Peas &c.
D. Staircase to the Strangers & Reporters Galleries.
E. E. Water Closets
F F. Rooms for the Speaker &c.
G. The Site of the Clerk of the Peas Offices proposed to be taken down.

B. Staircase to the Peers Gallery in the Basement Story.
C C. Staircases to the Upper Tiers of Seats, and to the Members Gallery.

Scale 50 ft 0 in 10 20 30 40 50 60 70 80 90 100 Feet.

PLAN of a DESIGN for a NEW HOUSE of COMMONS, proposed to be erected on a Site Eastward of St. Stephen's Chapel, and for improving the approaches to, and communications between the Two Houses of Parliament &c.

John Soane Archt
April 1833.

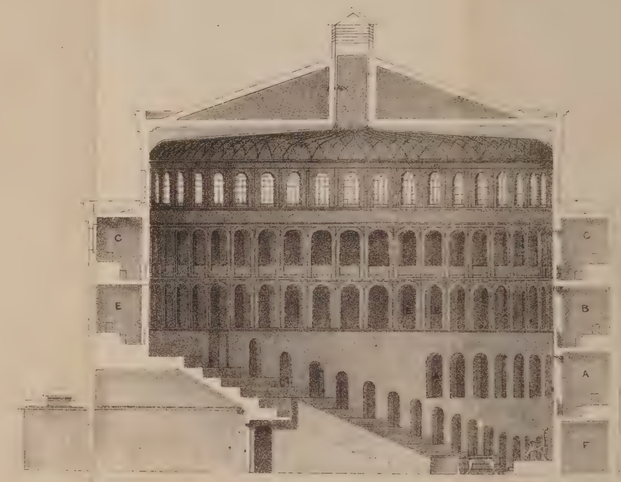
DESIGN FOR A NEW BUILDING
FOR THE HOUSE OF COMMONS.

Ja Savage
31 Essex Street
22 May

PART OF WESTMINSTER HALL
CLOISTER
SPEAKER'S HOUSE.
SPEAKER'S GARDEN
LOWER LOBBY
LOBBY
PRESENT HOUSE OF COMMONS TO BE LOBBY FOR MEMBERS ONLY
LOBBY
STAIRS TO MEMBERS GALLERY
PROPOSED APPROACH TO THE NEW HOUSE
LOBBY FOR MEMBERS ONLY
PASSAGE TO & FROM UPPER SEATS
BAR
TABLE
CHAIR
CORRIDOR
THE LONG GALLERY.
THE HOUSE OF LORDS.
HOUSE OF COMMONS LIBRARY.
STAIRS TO STRANGERS GALLERY
STAIRS TO REPORTERS GALLERY
STAIRS TO PEERS GALLERY
COTTON GARDEN.
THE KINGS ROBING ROOM.
PAINTED CHAMBER.
SUB ENTRANCE FOR CARRIAGES UNDER COVER
CARRIAGE APPROACH ROAD

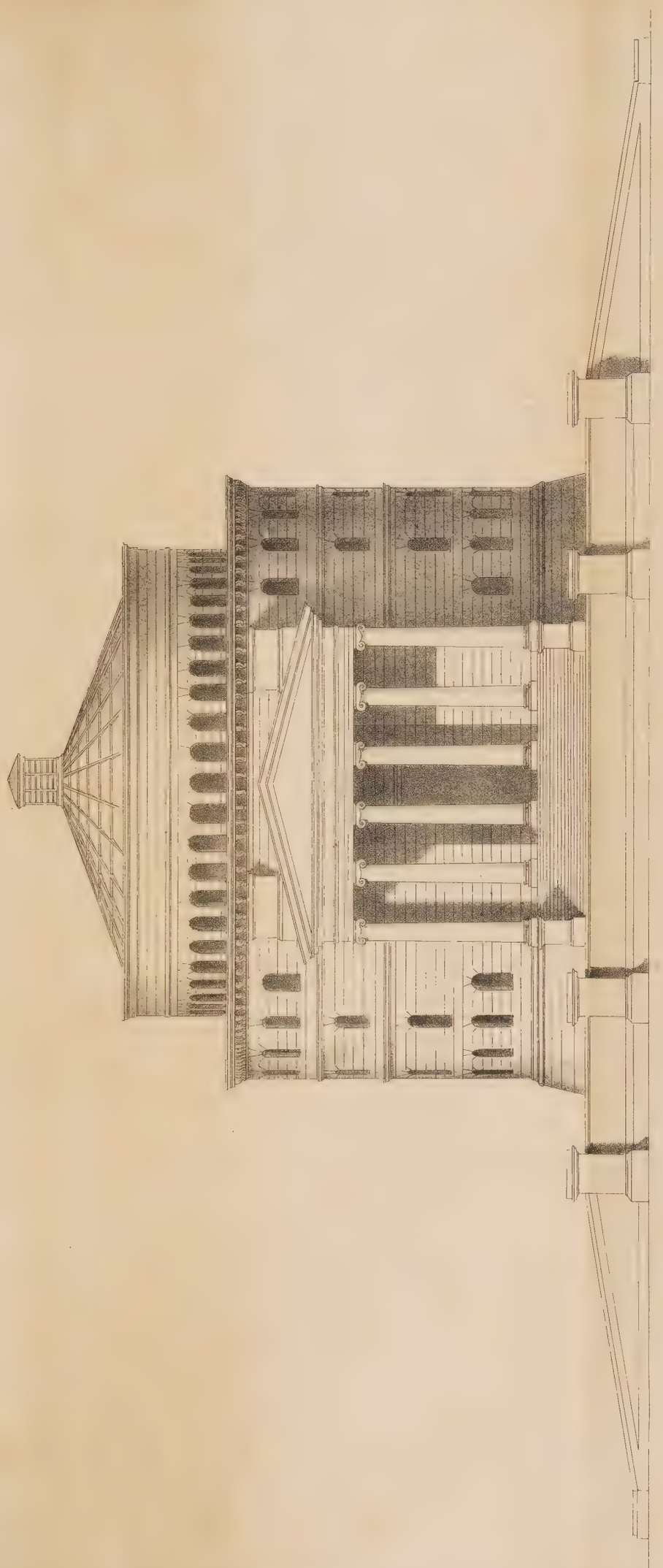
PLAN.

SCALE
10 0 10 20 30 40 50 60 Feet



SECTION from West to East.

A. *Peer's Gallery over Corridor, behind the Speaker.*
B. *Reporter's Gallery over the Peer's Gallery.*
C. *Stranger's Gallery.*
E. *Member's Gallery continued two-thirds round the house, & within sight*
F. *Corridor continued all round the House.*



ELEVATION OF EAST FRONT NEXT RIVER OF A DESIGN FOR A NEW BUILDING FOR THE HOUSE OF COMMONS.

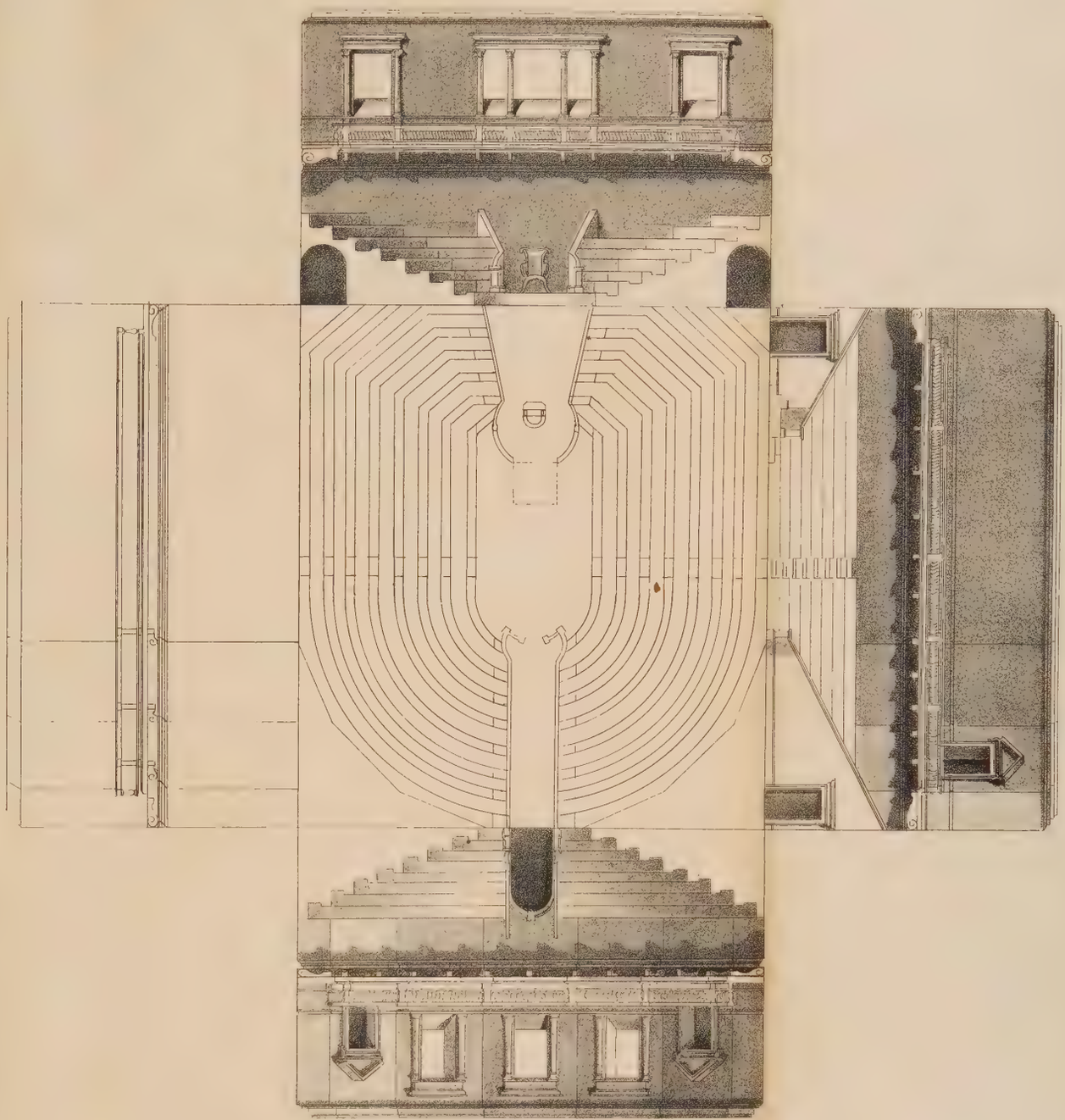
10 5 0 10 20 30 40 50 Feet

Barry Architect
2 May 1833.

209. Ordered, by the House of Commons, to be Printed, 13 May 1833.

James & Luke G. Hansard & Sons, Printers.

(D 2.)



·COPY·OF·A·PLAN·FOR·A·NEW·

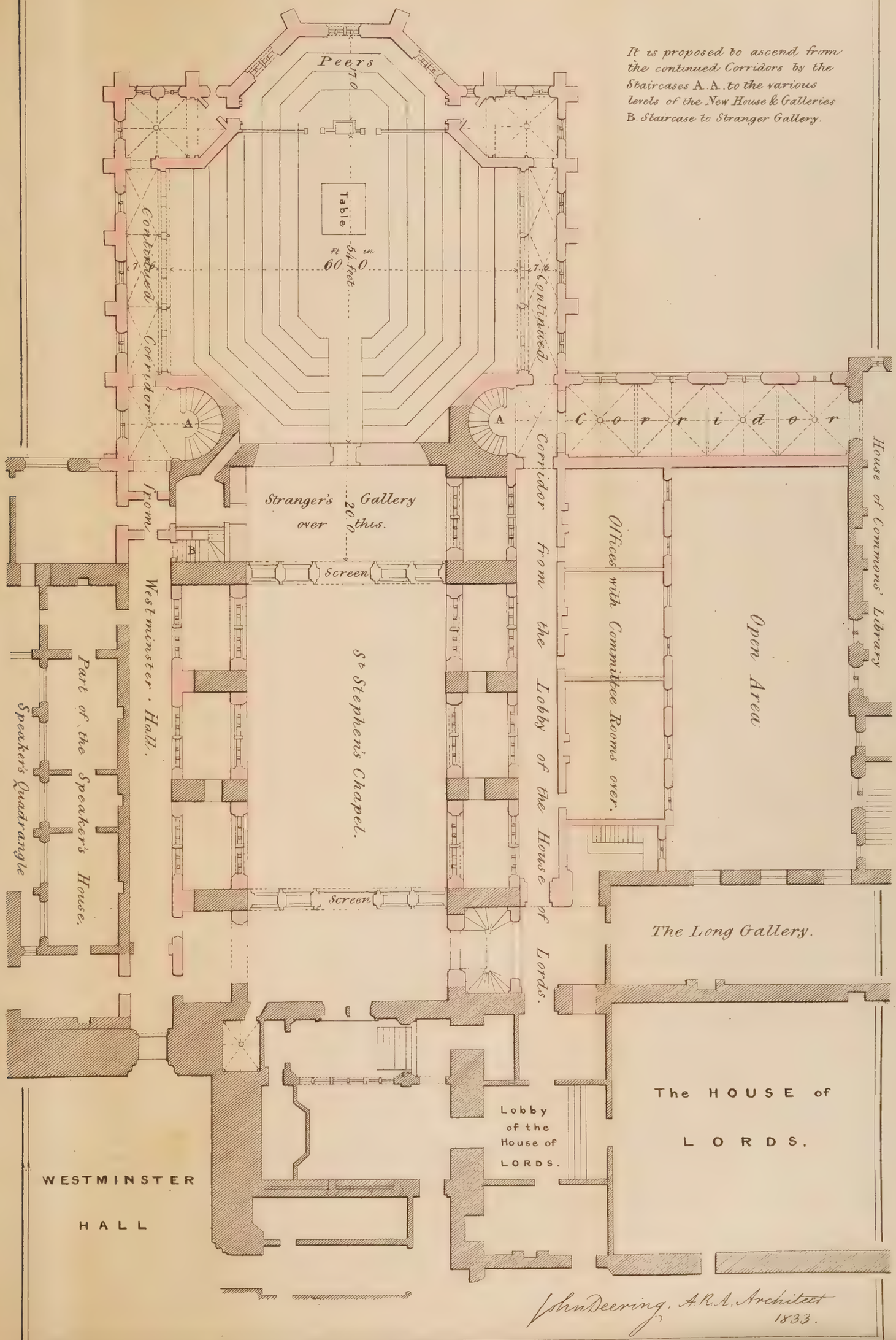
HOUSE · OF · COMMONS ·

DESIGN'D · BY · THE · LATE · Wm · KENT · ARCHT · DATED · 1739.

Ja Savage Archt
31, Essex Str.t Strand.
1st May, 1833.

10 5 0 10 20 30 40 50 60 70 80 90 feet

269. Ordered, by the House of Commons, to be Printed, 14 May 1833. *J. Basire, lithog.*
James & Luke G. Hansard & Sons, Printers.


It is proposed to ascend from the continued Corridors by the Staircases A.A. to the various levels of the New House & Galleries
B. Staircase to Stranger Gallery.
Peers
Table
ft. 60 in. 0
54 feet
70
Continued Corridor from
Continued
A
B
Stranger's Gallery over this.
20 0
Screen
Screen
Westminster Hall.
Part of the Speaker's House.
Speaker's Quadrangle
St Stephen's Chapel.
Corridor from the Lobby of the House of Lords.
C o r r i d o r
House of Commons' Library
Offices with Committee Rooms over.
Open Area
The Long Gallery.
The HOUSE of LORDS.
Lobby of the House of LORDS.
WESTMINSTER HALL
John Deering, A.R.A. Architect
1833.

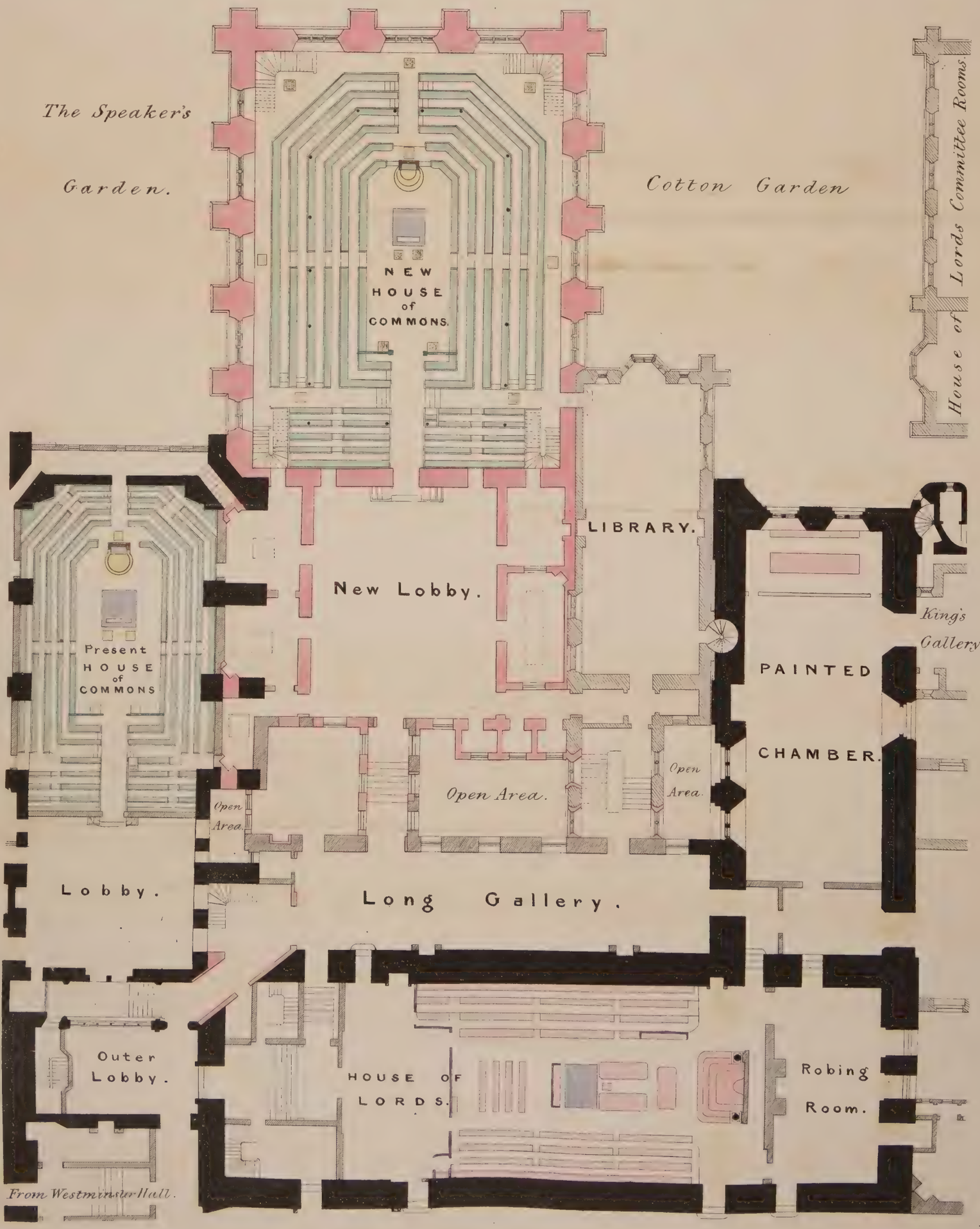
Front towards the River Thames.

PRINCIPAL PLAN.

of a proposed

NEW HOUSE of COMMONS,

by Adam Lee, 1833.



Scale.

20 10 0 20 40 60 80 100 Feet.

269. Ordered, by the House of Commons, to be Printed, 13th May 1833.
J. Bayne lith.
Hansard, Dyke & Bensted, & Sons, Printers.

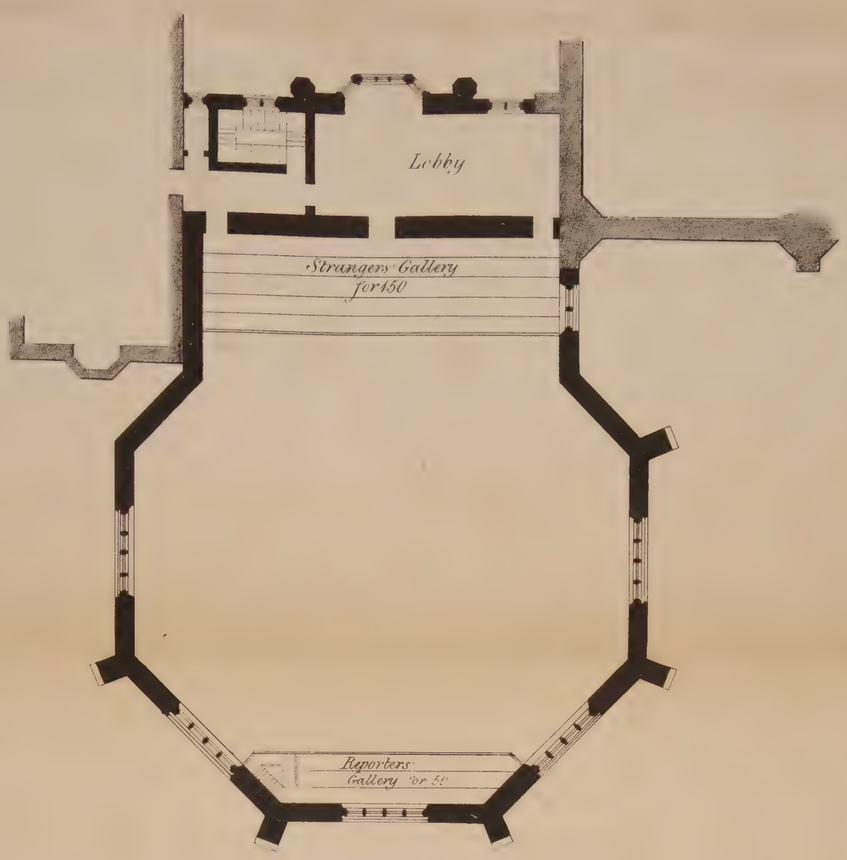
Bansard & Son... Printers.

J. Basire Lith.

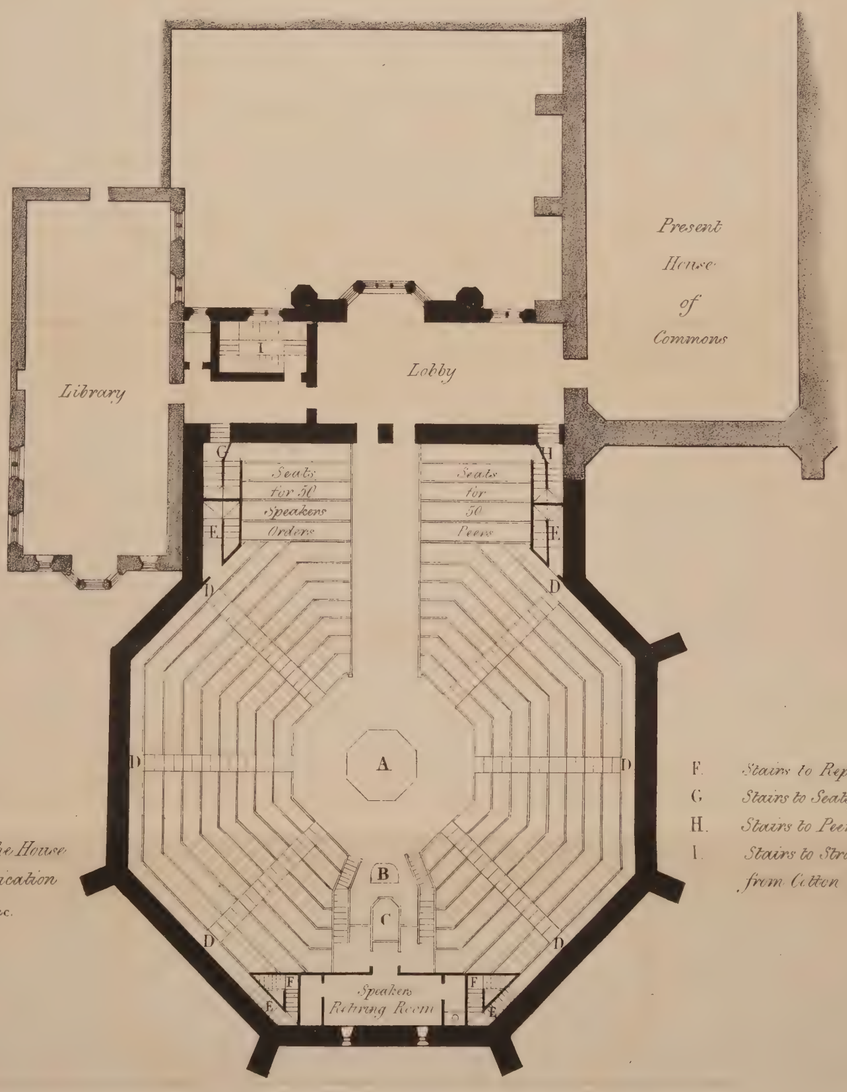
A PERSPECTIVE VIEW of a PROPOSED NEW HOUSE of COMMONS, 1833.

Conformably with Plan 8, by ADAM LEE.

269. Ordered, by the House of Commons to be Printed, 13th May 1833.



Gallery Plan.



A. *Table.*
B. *Table for Clerks*
C. *Speakers Chair.*
D.D. &c *Passage round the House*
E.E. &c *Stairs for communication with Passage* D.D. &c.

F. *Stairs to Reporters Gallery.*
G. *Stairs to Seats for Speakers Orders.*
H. *Stairs to Peers Seats.*
I. *Stairs to Strangers Gallery from Cotton Garden.*

Ground Plan.

PROPOSED HOUSE OF COMMONS.

To accompany Mr Blore's Evidence.

Accommodation for 640 Members, without a Gallery.

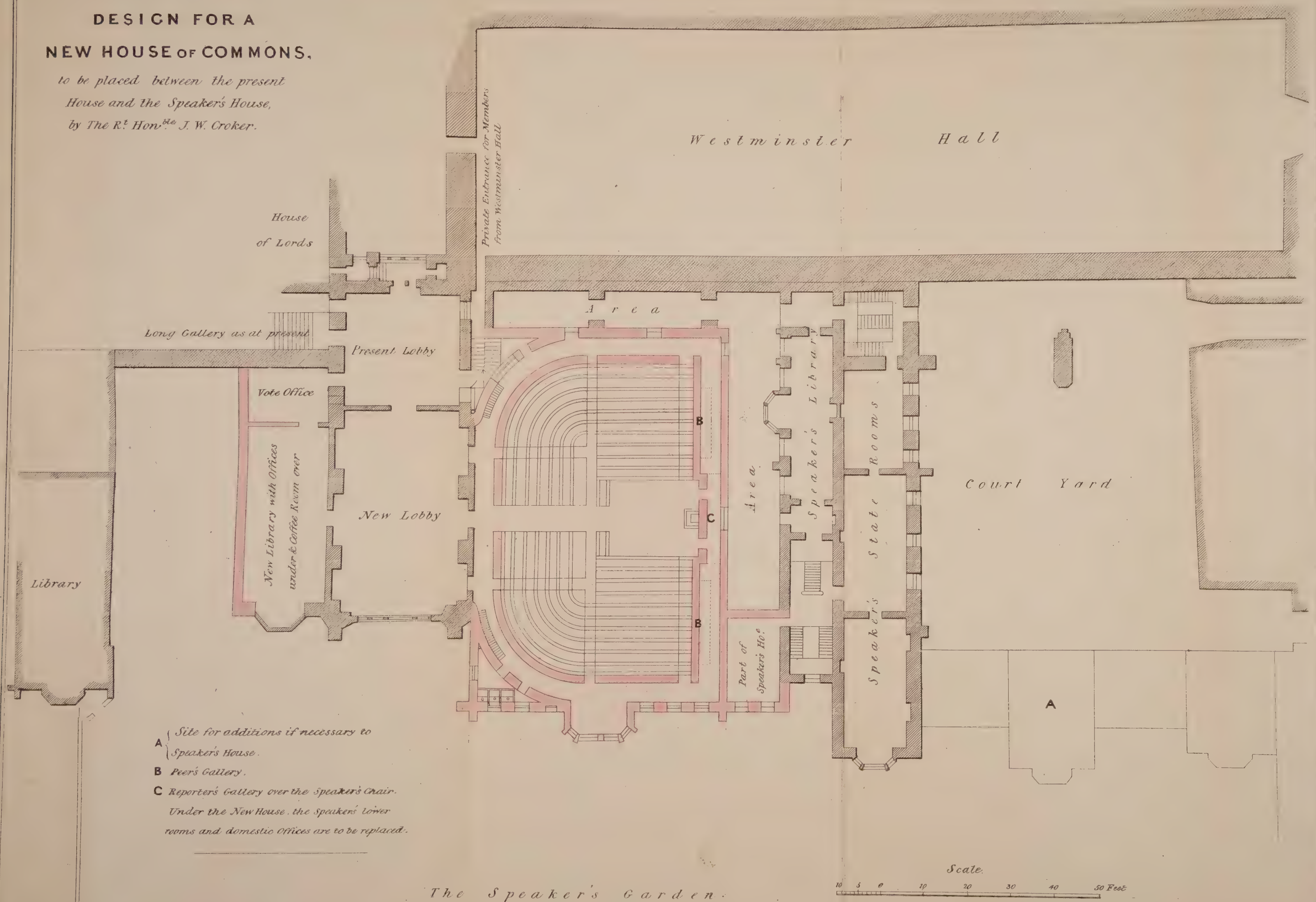
269

Ordered by the House of Commons to be Printed 13th May 1833.

B.

DESIGN FOR A NEW HOUSE OF COMMONS,

to be placed between the present House and the Speaker's House, by The Rt. Hon.ble J. W. Croker.



A { Site for additions if necessary to Speaker's House.

B Peer's Gallery.

C Reporter's Gallery over the Speaker's Chair.

Under the New House, the Speakers' lower rooms and domestic Offices are to be replaced.

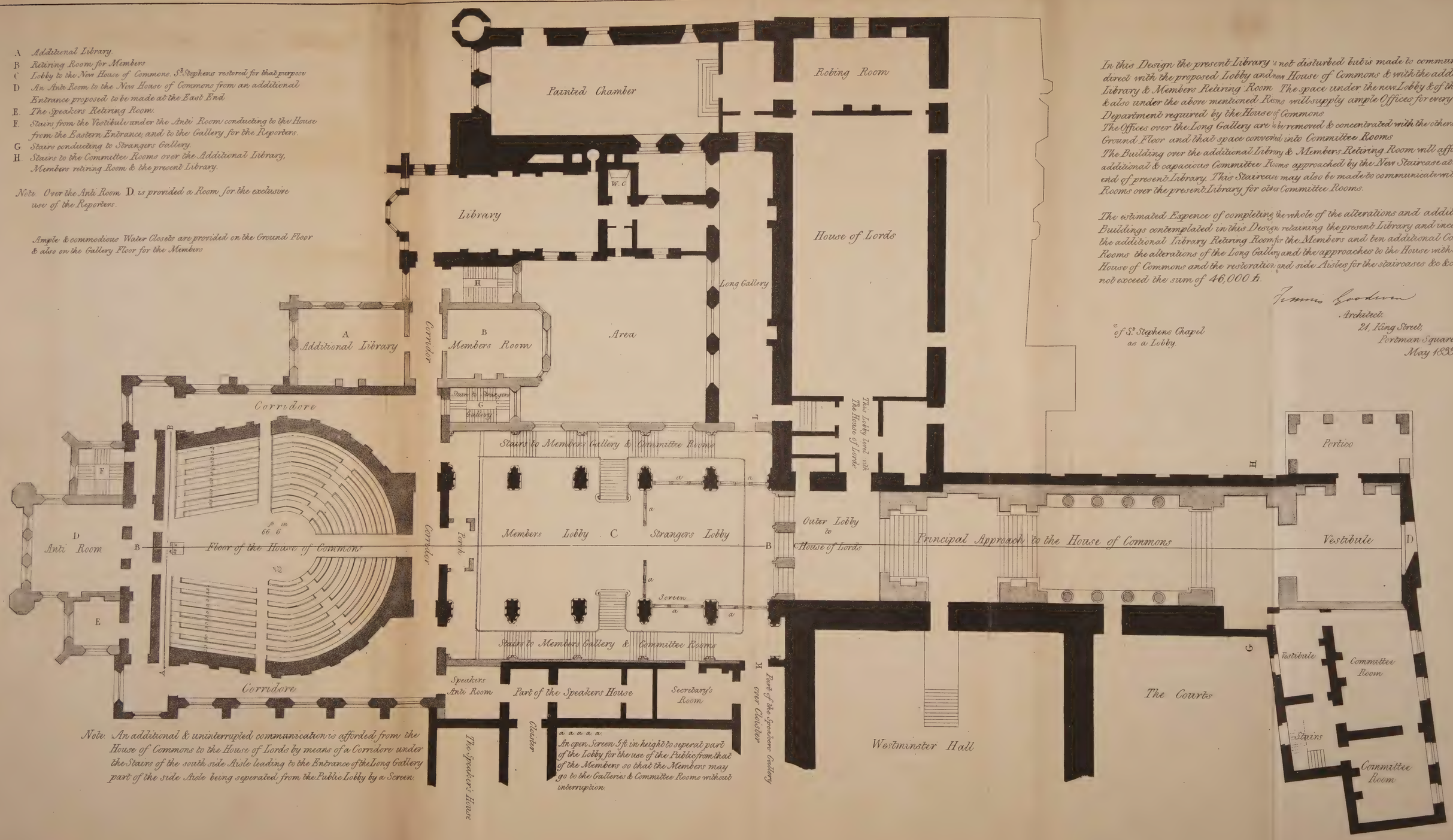
James & Luke G. Hansard & Sons, Printers.

269. Ordered by the House of Commons to be Printed, 13th May 1833. J. Easire, Lith.

A *Additional Library*
B *Retiring Room for Members*
C *Lobby to the New House of Commons. St. Stephens restored for that purpose*
D *An Anti Room to the New House of Commons from an additional Entrance proposed to be made at the East End*
E. *The Speakers Retiring Room.*
F. *Stairs from the Vestibule under the Anti Room conducting to the House from the Eastern Entrance, and to the Gallery for the Reporters.*
G *Stairs conducting to Strangers Gallery.*
H *Stairs to the Committee Rooms over the Additional Library, Members retiring Room & the present Library.*

Note Over the Anti Room D. is provided a Room for the exclusive use of the Reporters.

Ample & commodious Water Closets are provided on the Ground Floor & also on the Gallery Floor for the Members



Note An additional & uninterrupted communication is afforded from the House of Commons to the House of Lords by means of a Corridore under the Stairs of the south side Aisle leading to the Entrance of the Long Gallery part of the side Aisle being seperated from the Public Lobby by a Screen.

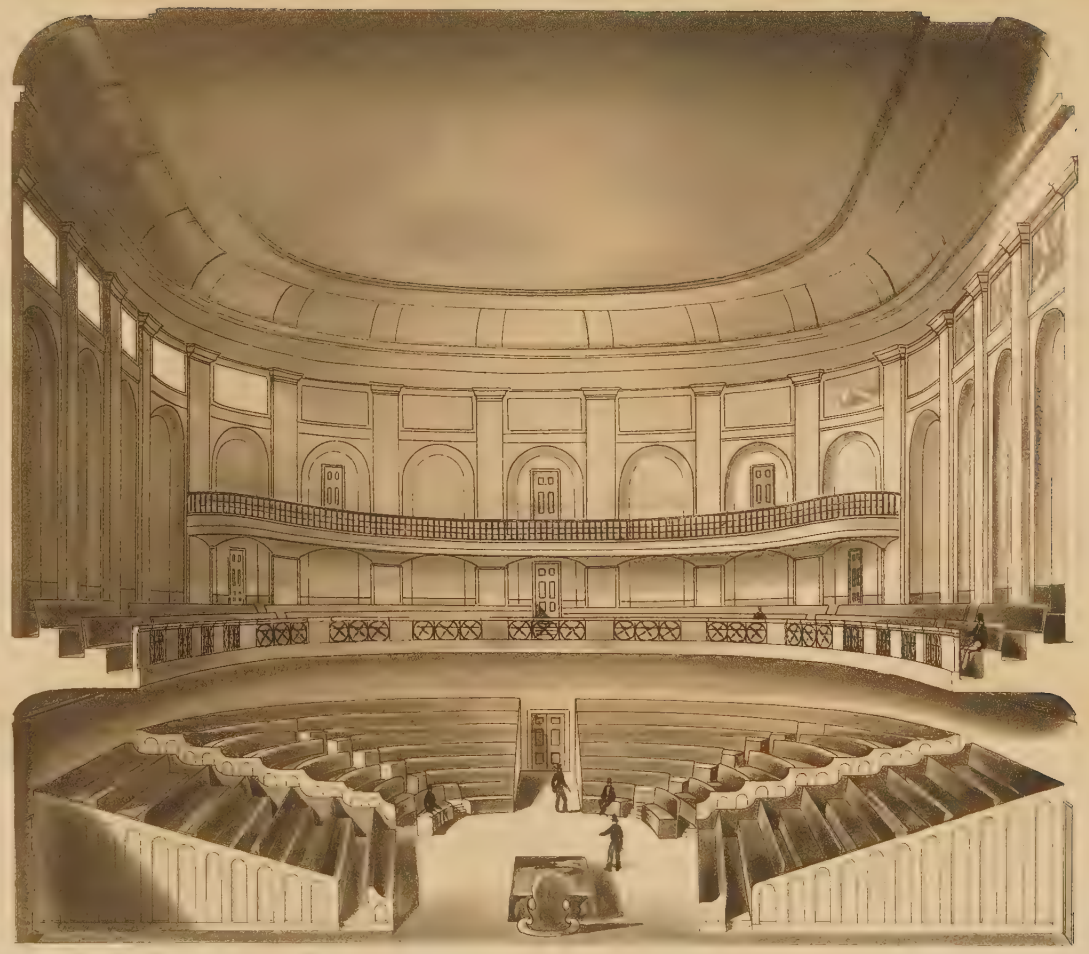
In this Design the present Library is not disturbed but is made to communicate direct with the proposed Lobby and new House of Commons & with the additional Library & Members Retiring Room. The space under the new Lobby & of the House & also under the above mentioned Rooms will supply ample Offices for every Official Department required by the House of Commons.
The Offices over the Long Gallery are to be removed & concentrated with the others on the Ground Floor and that space converted into Committee Rooms
The Building over the additional Library & Members Retiring Room will afford six additional & capacious Committee Rooms approached by the New Staircase at the east end of present Library. This Staircase may also be made to communicate with the Rooms over the present Library for other Committee Rooms.

The estimated Expence of completing the whole of the alterations and additional Buildings contemplated in this Design retaining the present Library and including the additional Library Retiring Room for the Members and ten additional Committee Rooms the alterations of the Long Gallery and the approaches to the House with the New House of Commons and the restoration of the side Aisles for the staircases &c &c will not exceed the sum of 46,000 £.

James Goodwin
Architect.
21, King Street,
Portman Square
May 1833.

** of St. Stephens Chapel as a Lobby*

Ordered by the House of Commons to be Printed, 13th May, 1833.



The Doors above the Porch and on the level with the Gallery communicate to the Corridors and the upper part of the House affording access to every Part of the Members & Peers Galleries

Transverse Sectional Perspective of the Lobby to the New House of Commons as proposed by Francis Goodwin Architect being the Chapel of St. Stephens restored with the addition of Side Aisles for the reception of Staircases conducting to the Members and Peers Galleries of the new House of Commons and to the Committee Rooms.

Perspective View of the Gallery of Approach to the New House of Commons from the Vestibule (the present Cloak Room) to the Outer Lobby. This Arrangement may be effected by the removal of only a few unimportant Rooms and will form a simple and straightforward ascent to the Outer Lobby and from thence through the Members Lobby in a direct line to the New House of Commons. The present communication with the Courts & Westminster Hall is preserved

Francis Goodwin.
Architect.

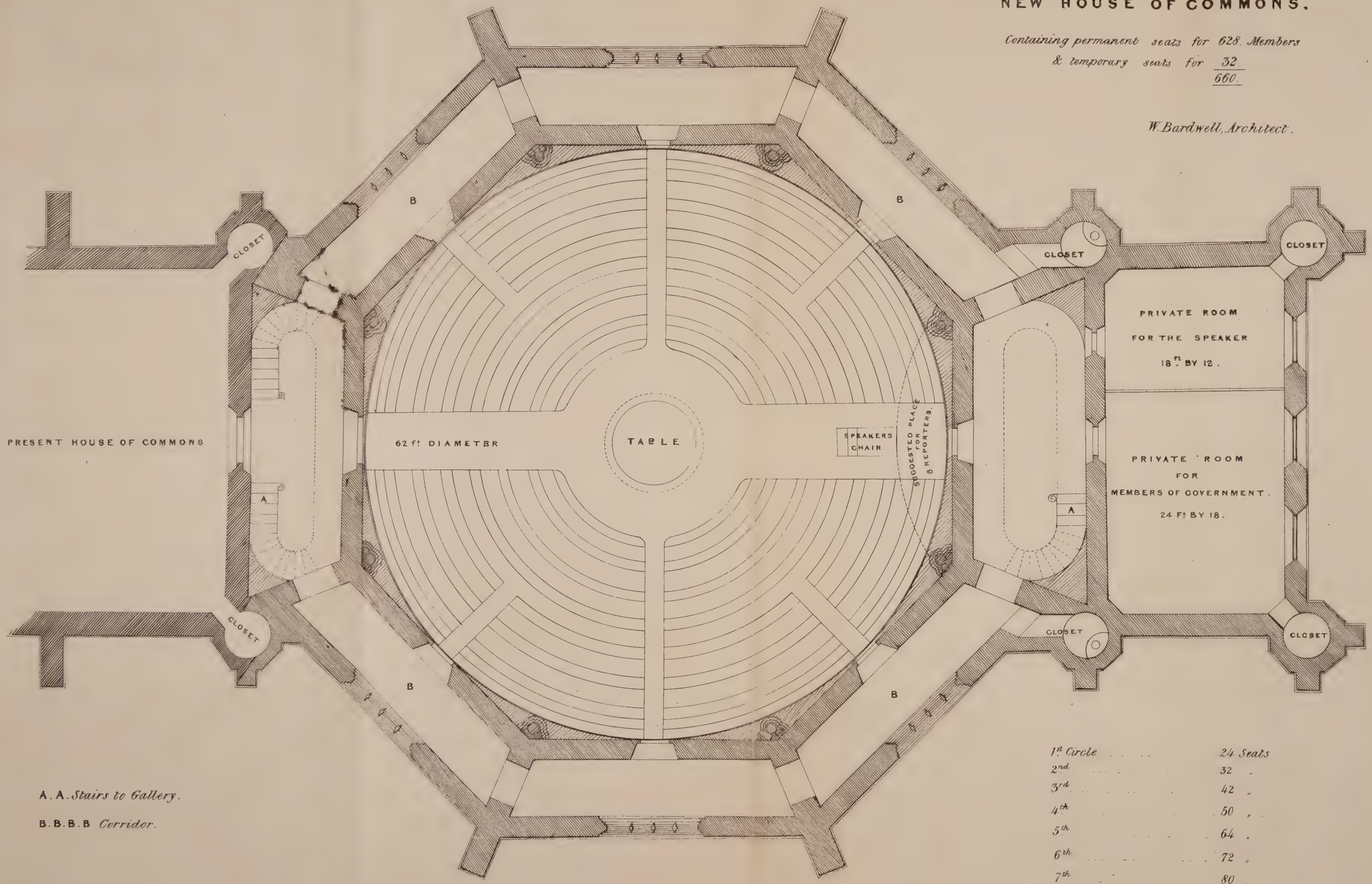
Drawn on Stone by T. Allom.

Ordered by the House of Commons to be Printed, May 13th 1833.

PLAN FOR A NEW HOUSE OF COMMONS.

Containing permanent seats for 628 Members
& temporary seats for 32
660.

W. Bardwell, Architect.



A. A. *Stairs to Gallery.*

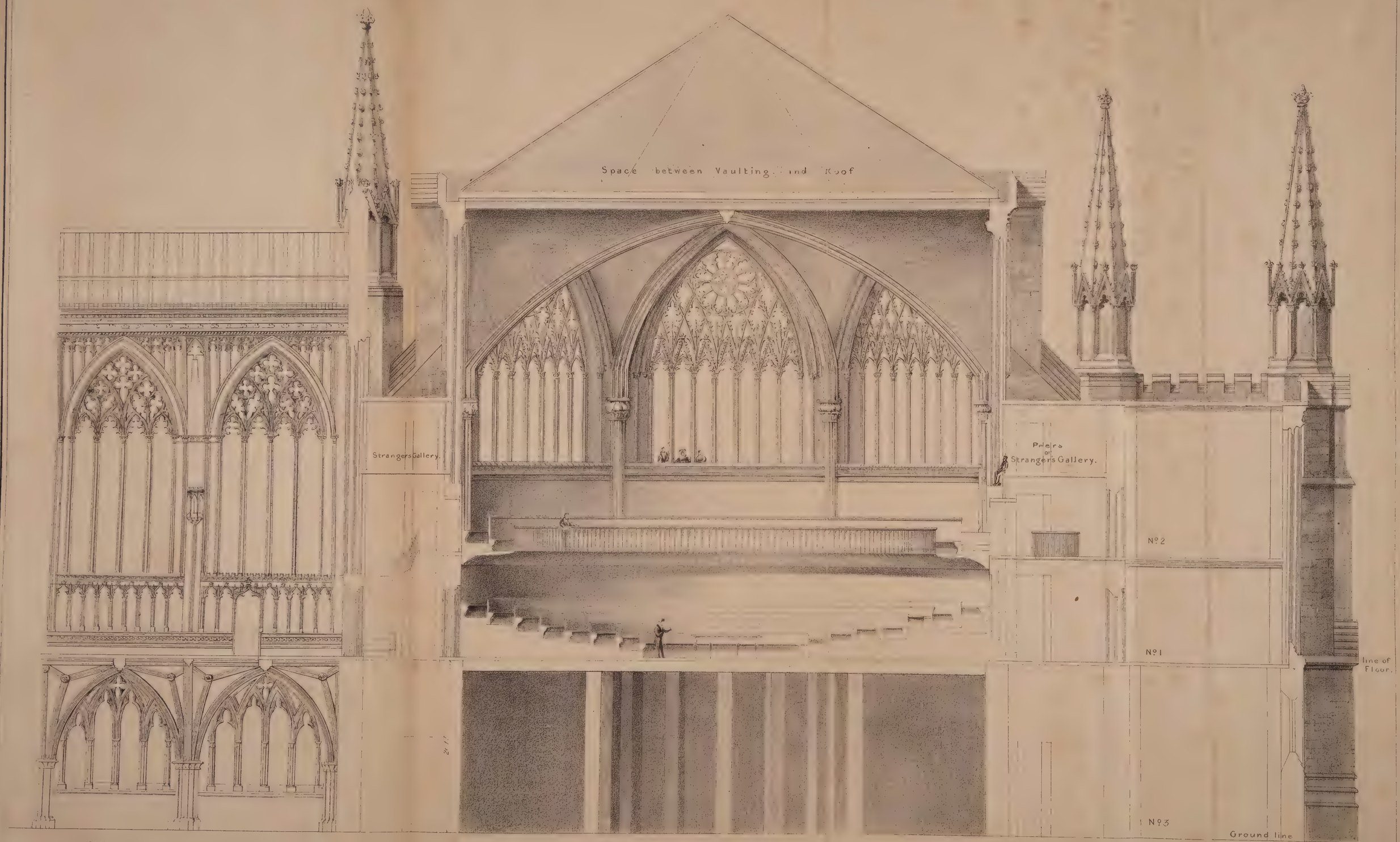
B. B. B. B *Corridor.*

1st Circle	*24 Seats*
2nd	*32 „*
3rd	*42 „*
4th	*50 „*
5th	*64 „*
6th	*72 „*
7th	*80 „*
8th	*88 „*
Two Circles in Gallery	*176 „*
	628

SCALE of FEET.

James & Luke Hansard & Sons, Printers

269. Ordered, by the House of Commons, to be Printed, 13 May 1833.



W Bardwell. Architect.

SECTION.

Scale 1/8 of an Inch to a Foot.

No 1. Private Room for Mr Speaker; and Members of Government
" 2. with small Library above, and
3. Others apartments beneath.

James & Luke G Hansard & Sons Printers.

269

Ordered by the House of Commons, to be Printed 25th May 1835.

J Basire Lith

OFFICES ATTACHED TO THE HOUSE OF LORDS.

COTTON GARDEN.

PAINTED CHAMBER.

HIS MAJESTY'S ROBING ROOM

THE LIBRARY.

PART OF LONG GALLERY.

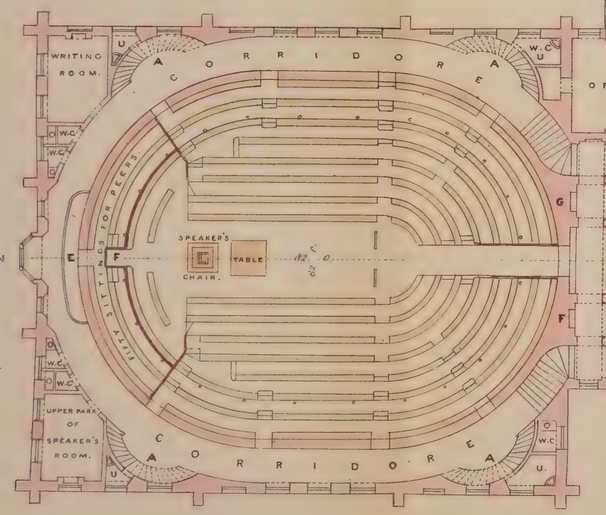
THE HOUSE OF LORDS.

ROOMS BELONGING TO THE HOUSE OF LORDS.

OLD PALACE YARD.

N.B. If the dimensions for the Members Sittings were allowed to be reduced from 3.4 to 3.0 the Area of the House could be considerably diminished.

SECTION



Scale of 20 Feet to an Inch.

OFFICE

VOTE OFFICE.

Court Yard.

THE CORRIDOR LOBBY

LORRINGTON'S OFFICES

STRANGERS' PASSAGE FROM GALLERY

SPEAKER'S PASSAGE.

THE PRESENT HOUSE of COMMONS

32. 0 × 61. 0

PRESENT LOBBY.

MEMBERS' ENTRANCE

SPEAKERS ENTRANCE

APPROACH AS PROPOSED TO BE IMPROVED

SERVANTS WAITING ROOM.

COMMITTEE ROOM. N° 11.

COMMITTEE ROOM. N° 12.

THE SPEAKER'S HOUSE.

WESTMINSTER HALL.

Reference.

- A.A.A.A. *Stairs for Members to the Gallery*
- B. *D° for Strangers*
- C. *D° to Offices & Smoking Room*
- D. *D° to Committee Rooms, Bellamy's & Offices*
- E. *D° to Peers Seats, communicating by a passage behind Speaker's Chair and under the upper benches with Lobby at G.*
- F.F *Private entrance for Speaker to the House and to his private Room.*

6 Water Closets & 4 Urinaries } *on each Floor*

Members' Sittings at 3. 4 by 2. 0

In Pit	*480*	
In Gallery	*120*	
	Total 600	
Peers Seats	*50*	*at 3. 4 by 2. 0*
Strangers & Reporters in Gallery	*150*	*at 2. 3 by 1. 8*
	Total 800 Sittings.	

N.B. The red tint denotes the proposed New Buildings.

Decimus Burton
Archt.
6 Kg. St. Pl. 33

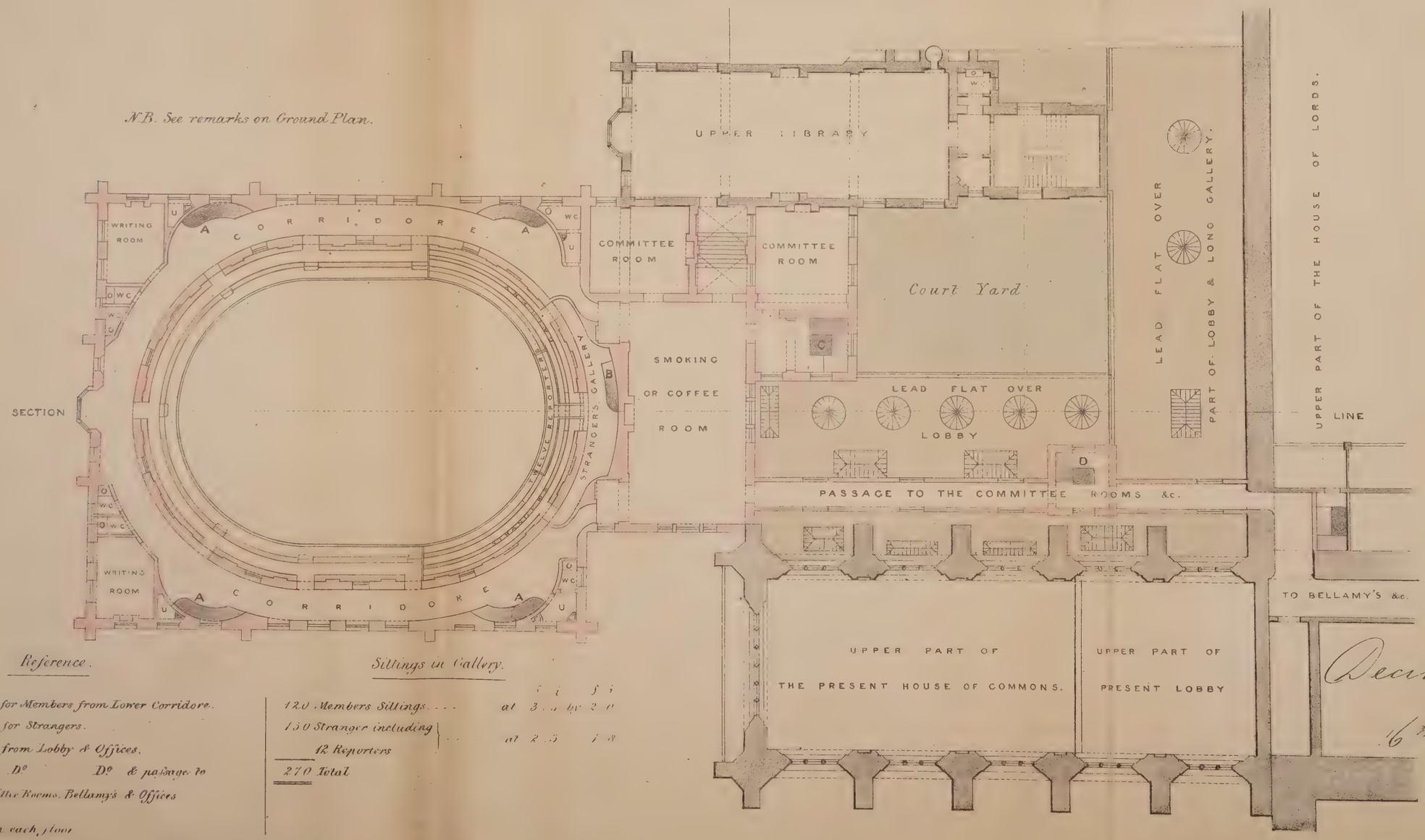
ON STONE BY J.S. TEMPLETON VI. NORFOLK ST. MIDDX. HOSPL

296.

Ordered by the House of Commons to be Printed 15th May 1835.

LONGITUDINAL SECTION OF THE PROPOSED NEW HOUSE & LOBBY.

N.B. See remarks on Ground Plan.



Reference.

A.A.A.A. *Stairs for Members from Lower Corridore.*
B. *Do for Strangers.*
C. *Do from Lobby & Offices.*
D. *Do Do Do & passage to Committee Rooms, Bellamy's & Offices*

6 Water Closets & 3 Urinaries } *on each floor*

Scale of 20 feet to an Inch

Sittings in Gallery.

		£	s	£	s
120 Members Sittings	*at*	*3*	*0*	*18*	*0*
150 Stranger including 12 Reporters	*at*	*2*	*5*	*1*	*8*
270 Total					

N.B. The red tint denotes the proposed New Buildings.

Decimus Burton
Arch.t
6th April 1835

Ordered to be printed by the House of Commons 13th May 1835.

2.96.

On Stone by J. S. Templeton. 6 Norfolk St. Middlesex Hospital.

Printed by Lefevre & Richardson

PLAN OF THE PRESENT HOUSES OF LORDS

With Plan and Section for

A NEW HOUSE OF COMMONS & OTHER BUI

George Basevi

WESTMINSTER HALL.

The Speaker's House.

Vote Office.

Outer Lobby.

Lobby.

HOUSE OF COMMONS 61 . 32

Rise 5¾

Rise 1 ft.

Rise 1 ft.

Rise 3 ft.

Rise 2 ft.

Rise 3 ft.

Staircase to the Offices under the new House.

Area.

Area.

New Gallery B.

Old Palace Yard.

Receiver of Fees Office.

New Vote Office.

Cotton Garden.

Passage.

THE HOUSE OF LORDS.

Long Gallery.

Door into the Gallery.

Door into Lobby.

New Lobby. 55 + 21

Entrance door into House.

Corridor. X.

The Speaker's Garden

Staircase to Gallery.

Staircase from Cotton Garden to Strangers Gallery.

Corridor.

Door

Queen's Robes.

W.C.

Gangway

46 ô

Table

Chair

Bar

Peer's Seats.

Corridor. X.

The Speaker's Apartments.

Corridor.

Staircase to Gallery.

Member's Staircase to Strangers Gallery.

Library.

Door into Lobby.

Area.

Rise 4 ft.

Descent 2 ô

Descent 1 ft 8

Descent 2 ô

His Majesty's Robing Room.

THE PAINTED CHAMBER.

A

Outer Lobby

Lobby

Staircase to the Offices under the new House.

Proposed new Entrance from Old Palace Yard to the New House of Commons through the Lobby of the House of Lords.

Old Palace Yard.

Receiver of Fees Office

New Lords Lobby made here.

The House of Lords.

Long Gallery.

New Gallery B

New Vote Office

The space occupied by His Majesty's Robing Room is proposed to be added to the House of Lords and a New Robing Room built Southwards at A.

Two Committee Rooms

Upper Lobby

Lobby

Corridor X.

Top of Gallery from floor 30 ô

82 ô

door

Old Palace Yard Arcade

Section line of the proposed new Entrance through the Lords Lobby from Old Palace Yard.

Section through the New House of Commons and New Lobby from West to East.

Scale of 0 5 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150 160 Feet

One of four Designs
for a
NEW HOUSE OF COMMONS,
made by
SIR JEFFRY WYATVILLE:
Marked C. 3. in the Evidence given before the Committee 1st April 1833.

This Design is calculated to contain the number of Seats proposed by the Committee, without the Members being in a Gallery, but the size of the House might be reduced if the Members were partly placed in Galleries

THE PAINTED CHAMBER

THE HOUSE OF COMMONS LIBRARY

AREA

W C

STAIRCASE

C. Staircase down to New Offices & up to Public Gallery *(for Members only)*

THE LONG GALLERY

THE HOUSE OF LORDS

The manner of improving the Approach to the House through Westminster Hall and the Stone Staircase from Palace Yard is by removing the Partitions shown by dotted lines and forming the lower Lobby, opening away through the wall under the present winders without disturbing the tracery above, taking out the small tracery from the lower compartments of the screen (on the top of the stairs, leaving the large mullions and by removing the mullion from the centre of the doorway to the Lobby of the House.

Staircase for Peers

Returning Room

THE TABLE

H

THE MEMBERS LOBBY

AREA

Passage to the New Offices under the New House of Commons

A. *This Landing to be made level with the House of Lords, so that the Speaker will only have to descend 7 steps, instead of going 14 down and 7 up, in his way to the House of Lords.*

The Speakers Returning Room

Secretary Speaker's Office

Gallery Staircase

Passage to the Public Gallery

A

B

The Speakers Private Way

B is a Staircase down to the New Offices and to Cotton Garden

Passage to the Committee Rooms and Palace Yard

A Gallery over this End for Peers & Gentlemen with the Speakers Orders

A Public Gallery to be over the Members Lobby and may or not advance over the three upper seats of the Members.

THE PRESENT HOUSE OF COMMONS to form the outer Lobby for the Public

The Lobby and the House of Lords on the same level

D E D

LOWER LOBBY

D D

STONE STAIRCASE

STAIRCASE

LETTER OFFICE

The House, as here shewn, is from the Wall behind the Speaker to the Wall of the Lobby, nearly 10 feet longer than the present house.

The Walls of the House are supposed to be in a square form with the Seats partly semicircular.

This Plan shews an improved way, for the Members and the Public, to the House of Commons.

Also from the House to the Committee Rooms, by a Landing across Westminster Hall, under the South Window.

It likewise contemplates a way for the Public from Cotton Garden to the Offices to be formed under the Member's Lobby and New House of Commons.

A Passage or Corridor to be formed on each side of the House under the three upper rows of Seats for a way to the Staircases at the East End and to the Speaker's private Room.

By this Plan the Eastern Window is left open and the Chapel might be entered. The Speaker's House is improved through the admission of more light and air by clearing away the excrescences between the Buttresses.

To be open Areas

THE SPEAKERS CLOISTER

PART OF THE SPEAKER'S HOUSE

Landing from the House of Commons to the Committee Rooms on the West

Stairs up to the House of Commons

Stairs up to the Committee Rooms

The present Steps

WESTMINSTER HALL

James & Luke G. Hansard & Sons, Printers.

HOUSE OF LORDS
LONG GALLERY
PAINTED CHAMBER
COURT YARD
LOWER LOBBY
WESTMINSTER HALL
PRESENT LOBBY
SPEAKERS GALLERY
VESTIBULE
AREA
CORRIDOR
PRESENT HOUSE TO BE USED AS LOBBY FOR MEMBERS
COURT YARD
CLOISTERS
THE SPEAKERS HOUSE
HOUSE OF COMMONS LIBRARY
MR DORRINGTON'S CLERK OF FEES OFFICE
VOTE OFFICE
COMMITTEE CLERKS OFFICE AND ENGROSSING OFFICE OVER SAME
STAIRCASE TO COMMITTEE ROOMS
W.C
LORDS COMMITTEE ROOMS
JOURNAL OFFICE
WAITING ROOM
PEERS SEATS
STAIRCASE TO STRANGERS GALLERY
COMMITTEE ROOM
PASSAGE
CORRIDORE
TABLE
SPEAKERS CHAIR
STAIRS TO GALLERIES OF HOUSE

Design N° 2,
of a
New House of Commons,
shewing
The Offices & Committee Rooms,
connected therewith.

Geo^e Allen
Architect
Southwark

Engraved by Luke G. Hansard & Sons Printers.

REPORT

FROM THE

SELECT COMMITTEE

ON

HOUSE OF COMMONS BUILDINGS;

TOGETHER WITH THE

MINUTES OF EVIDENCE

TAKEN BEFORE THEM.

Ordered, by The House of Commons, *to be Printed,*
6 *October* 1831;
And to be Re-printed, 19 *February* 1833.

17.
308.

THE REPORT - - - - - - - - - - p. 3.
MINUTES OF EVIDENCE - - - - - - - - p. 5.

REPORT.

THE SELECT COMMITTEE appointed to consider the Possibility of making THE HOUSE OF COMMONS more Commodious and less Unwholesome; and who were empowered to report their Observations and Opinion, together with the MINUTES OF EVIDENCE taken before them, to The House; and who were instructed to inquire in what manner adequate Accommodation can be best afforded for its Members;——HAVE examined several eminent Architects, and have agreed to the following RESOLUTIONS:

Resolved,

THAT it is the Opinion of this Committee, That the present House of Commons does not afford adequate Accommodation for its Members.

Resolved,

THAT it is the Opinion of this Committee, That no such Alterations or Improvements could be made in the present House of Commons as would afford adequate Accommodation for the Members, due regard being had to their Health, to general Convenience, and to the Dispatch of Public Business:

And that the Committee, therefore, could not contemplate any other alternative than to recommend the Construction of a New House of Commons; but that they were unwilling to pursue the consideration of a subject of such Magnitude, and involving so much Expense, without recurring to the Opinion of The House.

6 *October* 1831.

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MINUTES OF EVIDENCE.

Mercurii, 17° *die Augusti*, 1831.

COLONEL TRENCH IN THE CHAIR.

Benjamin Wyatt, Esq. was called in, and delivered the following

MEMORANDUM:

Benjamin Wyatt, Esq.

17 August 1831.

THE present walls at the east and west ends of the building, which was formerly St. Stephen's Chapel, and within which The House of Commons is contained, are evidently no part of the original structure; and if the Chapel were to be restored, generally, to its pristine shape and dimensions, it would be necessary to remove great part of these two walls, or probably the whole of them, in order to re-establish the original features of those parts of the building as nearly as it may now be practicable to trace or form a judgment of them. But, in the meantime, to accomplish the object of rendering the House of Commons more commodious and suitable to the number of its Members, and to render the expense of doing so as light as possible, these two external walls might be left standing as they now are, with no other alteration than to cover their internal faces with cement, and joint and colour them so as to accord in tone with the stone work of the north and south sides of the building.

In order to accomplish the primary object of increasing the accommodation for the Members of the House of Commons, and of ultimately restoring the building to the form and dimensions which it formerly had as St. Stephen's Chapel, it appears that the operations necessary, in the first instance, would be to remove the partition which now divides the body of the House of Commons from its Lobby; to extend the Lobby on the west side, by removing the lower part of the wall on that side, and by supporting the upper part of that wall upon iron columns; by opening the screen which now divides the upper Lobby from the lower one, and raising the floor of the latter; to remove the present horizontal ceiling of the House of Commons, and throw open to the House the roof which is above that ceiling, casing the inclined lines of the interior of that roof with boards, to be painted in representation of oak, and also casing and painting in a similar way (or perhaps painting without casing) the timbers which constitute the support (or what is technically called the principals) of the roof, above the present ceiling; to make good the present seats to the increased size of the House; and such contingencies as may immediately and necessarily appertain to these alterations, but which it is almost impossible now to detail.

These works, it is presumed, might, without any attempt at internal decoration, or any general restoration of the ancient features of the interior of this building, be effected for about the sum of 3,500*l.*

Mr. *Wyatt* was Examined by the Committee as follows:—

1. Does not the plan that has been suggested carry the roof of the House of Commons up to the top of the building?—It takes away the present ceiling and lays open to the body of the House the roof, excepting that it is proposed to line the roof with boarding; at present the timbers are open to view, and probably the sound

Benjamin Wyatt, Esq.

17 August 1831.

sound might not be so well reflected as if it was lined with boarding on the inclined side of the roof.

2. Do you consider a roof of that description as favourable for hearing as if it was a flat roof?—I suppose that the direct reverberation of sound would not perhaps be so strong as it would on any thing horizontal that was very near to the head of the speaker. We find in many of the cathedral churches that the voice is quite as well or better heard than in most chapels, the roofs of which in general are as ill calculated, on every principle of acoustics, as any thing can be for the direct reverberation of sound.

3. You are aware that the protection of hearing is one of the most essential parts of the plan in contemplation?—Most certainly. Every thing with respect to the conveyance of sound is so very uncertain, that it is quite impossible to be sure whether it might be improved or injured in some small degree. It is totally impossible in any change of the kind to be sure.

4. Do you not imagine that the lantern in the centre of the House absorbs a considerable portion of the sound?—There cannot be a doubt of it; because, when you stand above the ceiling you hear the voice in the cavity above it most distinctly, which could not be the case unless the sound escaped from below.

5. You are aware that Sir Christopher Wren placed the present flat ceiling to the House of Commons?—Yes, I am.

6. Do you think it could have been for any other object but to improve the sound, or promote the warmth of the House of Commons?—It might be so; but it certainly put the House in rather better proportion than it would have been in, if it had gone to the whole height of the external roof, being at the same time limited in length as it is now.

7. Might it not have been to cure some defect in hearing?—It might also have been from the general assumption, that it was likely to contribute better to the reverberation of sound. I am quite sure that Sir Christopher Wren nor any man who ever lived, could be sure of that.

8. It might at the same time have been for the temporary repair of St. Stephen's Chapel?—I think it was for the purpose of putting the room in better proportion than otherwise would have been the case, being limited in length. That would not be the case if the House were extended to the full length of the Chapel. We may fairly presume that the original height would be the best thing with reference to the original length.

9. Do you see any difficulty in adopting the plan proposed, of taking away the flat roof, and opening it to the original roof, showing the Gothic tracery?—I see no difficulty in doing that, the timbers being left in exactly the position they are now. It is on these timbers the roof depends.

10. The present is not the original roof of St. Stephen's Chapel?—No; the original roof was probably a stone roof.

11. There is no danger in the plan proposed?—Not the least, as long as the main timbers, which now form the strength of the roof, are left in their places. They will not form a handsome feature, certainly. I was supposing that at some future period, the Chapel might be restored to its original form, and the roof altered.

12. According to your plan we should have these wooden beams in the House?—They must be left open to view.

13. Would they not be very unsightly?—As I stated at the last meeting, they would be unsightly. I proposed to give them a tolerably fair appearance by painting them to represent oak. You could not attempt to alter the construction without taking the whole away.

14. There was a crack discovered between the end window and the front window; as it is now, do you apprehend there is any danger from the existence of that?—No, not at all. It might perhaps be prudent to introduce some iron ties in that part.

15. If the plan for projecting the end of the Chapel, not restoring the old Chapel, but projecting the new up the whole width into The Speaker's garden, had been adopted, do you apprehend that portion might have been pulled down and rebuilt?—I should have thought it very unsafe to attempt that; I do not think you could calculate in that case on what portion of the old side walls would ultimately remain.

16. Is there not space enough to raise the ceiling independent of these great beams?—No.

17. You come directly to the beams?—The same horizontal beams that form the main tie of the roof constitute the support of the floor also; the floor is on them. The whole ceiling is suspended from the timbers of the upper floor, I mean the floor of the space above. *Benjamin Wyatt*, Esq. 17 August 1831.

[The Committee here went to inspect the Roof of the House, accompanied by Mr. *Wyatt*. On their return, Mr. *Wyatt* was again called in; and further Examined.]

18. The Committee wish to have Plans of two distinct projects, the one giving the enlargement of the House, and a communication round the House, without touching the ceiling at all; the other would embrace the taking away the ceiling, and putting on a new roof; what is the shortest time in which you think you would be able to give a rough idea of the one and the other?—About ten days.

19. So much as that?—I think not less.

20. Do you know what was done as to altering the House at the time of the Union?—I think I could in part answer that question. The alteration at the time of the Union was made by my father. I remember frequently hearing him talk of it, and say that he had wished at that time to extend the House to the full length of the old Chapel; that project was, I believe, entertained for some time; but I have never seen any of the drawings among his papers.

21. Could you not give the rough plan of both these arrangements within a week?—I am afraid to promise it so soon; there is a great deal to examine into.

22. Do you think Friday week would be too early?—I think that will be about the time; I am quite certain that something in the shape of a timber roof, a suitable timber roof, could be done for about 4,000*l.*, provided the walls are in a fit state to receive it; but that, without examination, we cannot be sure of.

23. By Friday week do you think you shall be prepared?—As far as it is possible to tell at present; if you take an old work of this kind to pieces, you sometimes find serious defects, that it is not possible to foresee; it might be dangerous to trust to the present walls without something further, perhaps flying buttresses on the main buttresses below.

24. Will not the timber in the roof all work in for another roof, or will it not be available, or saleable?—I cannot say; old timber, cut up for a particular purpose, will not sell for much for another purpose.

Mercurii, 31° *die Augusti*, 1831.

Benjamin Wyatt, Esq. called in; and produced a Plan of the House of Commons as at present existing, and a Plan of the Improvements he was instructed to provide for.

25. CAN you form any estimate of the total expense of this plan, either by restoring that part of the work which is visible (above the present ceiling) to its former state, or otherwise?—No; I think it is impossible to do it with any accuracy, unless it was known in what state the work is which the new work would have to stand on, and that could not be known unless the panels of the wainscot were stripped. There is a very great extent of work in each of the piers and windows; and I conceive that it is totally impossible to ascertain with any accuracy beforehand what would be the expense of restoring the upper parts of that work, without having previous knowledge of what is the state and condition of the lower parts on which it would have to stand. 31 August 1831.

26. Have not you examined that?—It is impossible to examine it; it is covered with the wainscot of the House, and particularly that part which is out of the House, in the Lobbies, which is proposed to be brought into the House. That could not be got at in the present state of the Lobbies.

Benjamin Wyatt, Esq.

MEMORANDUM:

31 August 1831.

I, the undersigned *Benjamin Wyatt*, have, in conformity with the instructions which I had the honour to receive on the 17th instant, prepared a Plan and Estimate, first, for giving to the House of Commons the desired enlargement, together with a passage of communication entirely around the House, without removing the timbers of the roof, or the ceiling now suspended below those timbers; and, secondly, Designs and Estimates for taking away the present roof and ceiling, and constructing and putting on a new roof.

In the course of a thorough examination of the various parts of the building connected with the above Plans and Estimates, I have met with many circumstances which, upon a more cursory inspection, previously made, were not discoverable, and which necessarily increase the quantity of work which was originally within my contemplation.

It appears that the present Vote Office is so confined that it will not admit of the smallest portion being taken from it; and consequently, that to form the proposed passage around the body of the House (which must pass through the Vote Office,) it becomes necessary to provide a new Vote Office in another situation. The same circumstances exist with respect to the present Office of the Clerk of the Fees. The former I propose to remove to the present Engrossing Office, building a new room, by the side of the Long Gallery, for the engrossing clerks; and the latter (namely, the Clerk of the Fees) I propose to provide for, by constructing a new office over a low building which there is close to the south-east turret of St. Stephen's Chapel. Under this arrangement, each of these three departments respectively will be better accommodated than they are at present, and the passage around the House, so much desired, be obtained, together with the acquisition of one small room which now forms part of the Clerk of the Fees Office, and which would become disposable for some new purpose, and several additional water-closets, on this level.

In order to make the proposed communication between the lower Lobby and the upper one, I perceive that it will be absolutely necessary to take down the greater part of the open screen which now separates the lower Lobby from the passage leading to the upper one. This screen has a heavy wall over it; and although the operation of taking down the screen, and altering and replacing parts of it, is very practicable and very safe, yet it would be dangerous to remove the small mullions of the screen (thereby seriously shaking the larger ones,) without going through the process which I suggest.

The proposed new arrangement of the body of the House, and of the Lobby to the same, renders it necessary to remove the present staircase leading to the Strangers' Gallery, which, as it is now situated, frequently occasions a throng of people in and about the Lobby of the House, and in various ways appears to cause inconvenience to the Members. To remedy this evil, and to provide a substitute for the present stairs to the Strangers' Gallery, I propose to construct a new staircase for the strangers in the space on the east side of the Lobby of the House of Lords, making the entrance to it by a door in the passage leading from Palace Yard to Cotton Garden; so that strangers, going to the gallery, would have no communication with the Lobby of the House, whilst the Members of the House would have an easy access to the gallery staircase by means of a door which now exists on the right hand of the steps descending to the Long Gallery.

To accomplish all the arrangements above specified, as well as a variety of minor and concomitant details, will, as nearly as I have, in the time afforded to me, been able to calculate, amount to a sum of 6,900 *l.*, supposing the present roof to remain, and the ceiling to be made good, at its present height, to the increased length of the House. I, however, cannot think that much advantage will be gained by the alteration, unless the present ceiling shall be removed; for, in the first place, the House would be in very bad proportion with a considerable addition to its length and none to its height; and, in the next place, without increased height, it would not be reasonable to expect that the inconvenience now experienced from the heat of the House, when full, can be removed. With a purer atmosphere in the House, arising from a greater body of air in circulation, and from an increased height to receive that part of it which shall have become impure, and which should be provided with an outlet between the cornice and the bottom line of the roof or ceiling,

£. 6,900.

ceiling, I have no doubt that the voice would be better heard than it is at present, especially if the ceiling were of the form described in the Design No. 3, alluded to in the following part of this Memorandum.

Benjamin Wyatt, Esq.

31 August 1831.

With respect to an eventual new roof, I have made three separate Designs, upon the following principles; viz.

First, the Design marked No. 1, upon the principle of restoring the roof to its ancient form, as nearly as the present means of tracing that form will admit of.

Secondly, the Design marked No. 2, upon the principle of confining the expense within the narrowest possible limit, consistent with sound work; and,

Thirdly, The Design marked No. 3, as being much more in accordance with the character of the building, supposing its ancient features to be restored, than the Design No. 2; and at the same time free from certain objections, which, in my opinion, apply to the Design No. 1.

Here I beg permission to remark, that, from circumstances, which I have observed within these few days, I entirely relinquish the idea which I expressed at the last meeting of the Committee, that the ancient roof of St. Stephen's Chapel was a stone roof: I am now convinced that it was composed of timber; first, because there are evident traces in the upper part of each of the piers between the windows of the places where the main timbers of the roof had their abutments on the walls, and where the cavities occasioned by the removal of those timbers have been filled up with brickwork: secondly, because the great cornice and frieze, upon the two side walls, run entirely through, in an unbroken line, from one end of the Chapel to the other, affording no indication whatever of the lines which the position of the groins must have left upon the walls had the roof been of stone; and, thirdly, because there is a roll in the Exchequer, which records the payment of a sum of money for two figures to be placed in one of the gables of this Chapel; whereas such decoration as those figures is not at all usual, if ever to be met with in any gable which has not considerable height. If the roof had been of stone, the parapets would either have been horizontal at the ends, as in King Henry the 7th's Chapel at Westminster, or of inconsiderable acclivity, similar to those of King's College Chapel at Cambridge.

Assuming, for these reasons, that the roof was of wood, I have taken for its springing line the position which appears to be pointed out for it in the upper parts of the piers already described, and have adopted for the outline of the principals themselves, as nearly as possible, the lines of the great arch, which are still manifest upon the upper part of the east wall, and which, from their appearance, I should say, were, in the original structure, most probably, in even range with the principals of the roof.

Considering the great length and the form of the principal timbers of the roof, according to this Design, I do not think that it would be advisable to construct it of any other timber than the best English oak, which must render it very much more expensive than either of the other Designs; which, owing to the forms and the minor dimensions of their timbers, might very well be constructed of fir timber, and painted, grained and varnished to resemble oak.

Although I have thought it right to submit to the judgment of the Committee something in the supposed form of the ancient roof of the Chapel, I should not feel justified in recommending the experiment of placing a roof of this form upon the present walls, because it is a form peculiarly liable to occasion severe lateral pressure, which ought in this instance to be carefully avoided. I do not think that the roof, according to this Design, could be executed in oak, and in a thoroughly substantial and proper manner, for a less sum than 5,934*l.*

£. 5,934.

With respect to the Design No. 2, I have nothing to suggest in its favour, but that it would cause no lateral pressure whatever on the walls, and that it would cost much less money than either of the other two; whilst its form and character are decidedly those of antiquity, although of a date long subsequent to that of St. Stephen's Chapel, and certainly not in keeping with the original splendour of that edifice. To construct this roof, in a proper manner, of Baltic fir timber, and to paint and grain and varnish it in the best manner, in imitation of oak, would cost 2,767*l.*

£.2,767.

As regards the Design No. 3, it has the advantage of guarding sufficiently against lateral expansion, whilst its features would not be at all at variance with the

Benjamin Wyatt, Esq.

the date of the splendour of the original edifice, should the internal decoration of that edifice be hereafter restored; and its cost would be but about one-third more than that of the foregoing Design No. 2. To complete the roof according to this Design, in a proper manner, with the best Baltic fir timber, and to paint, grain and varnish it in imitation of oak, would amount to 4,135*l.* or 3,572*l.* over and above what would be required to make good the present ceiling to the proposed increased extent of the House.

£. 4,135.
£. 3,572.

31st August 1831. *Benj. Wyatt.*

Mercurii, 14° *die Septembris* 1831.

Benjamin Wyatt, Esq. again called in; and further Examined.

Benjamin Wyatt, Esq.

27. WHAT do you consider to be the space to be allotted to give convenient seats to the Members of the House?—Two feet, at least, to each Member.

14 Sept. 1831.

28. Can you state what breadth of seat affords the greatest convenience?—I think the seats, if they have backs to them, from the back of one seat to the back of the next, allowing room for the knees of the person sitting on them, should not be less than three feet four or three feet six, to allow for others passing by; whereas under the Strangers' Gallery at present there is literally only from one foot ten to two feet from the back of one seat to the back of the next.

29. Is there any possibility of a person passing in or out of these seats without any inconvenience?—It is impossible to pass at all, unless those who were sitting would stand up.

30. What is the distance between the back of one seat and the front of the other, in the House as now existing?—It is very generally, on the sides of the House, two feet eight.

31. You consider that two feet eight is too small a space to admit of Members sitting and others passing?—Certainly; they cannot pass without great inconvenience to those who are sitting.

32. What is the extreme width of the House, from pier to pier, at the present moment?—It is about 33 feet from pier to pier.

33. You have stated the breadth to be two feet eight of the present seats, do you mean the seats on the side of the House, or the seats to the end towards Solomon's Porch?—They vary more at the east end than they do on the sides, but they are very generally about what I have said.

34. Have you measured those seats behind The Speaker's chair, under the window?—A few of them are very narrow; generally, they are not. Some of them in that quarter are narrow; that just under the window is very narrow.

35. What is the open space in the floor?—It is about 14 feet.

36. Leaving what on each side for seats?—The difference between 14 and 33, which is 9½ to each side, exclusive of the recesses.

37. At the space which you have considered requisite, how many rows of seats will that admit, at three feet four or three feet six inches?—Not quite three.

38. In the place where four are now placed?—In the place where four are now placed.

39. What number of Members can sit in the body of the House as it now is, allowing the distance of two feet in every part of the House, not including those under the Strangers' Gallery?—Three Hundred and Forty-two.

40. What number would the House accommodate, supposing in those four benches an alteration to be made, giving an increased space from front to back for comfortable seats?—Two Hundred and Ninety-four; allowing three feet six inches from back to front of seats in the lower part of the House, and leaving the gallery seats as at present; because there would be a great deal of lost room if one of the present seats were to be removed, and the front of the gallery to remain where it is now.

41. Will you also state how many Members can be accommodated under the Strangers' Gallery as it now exists?—Fifty-four, at two feet each seat.

42. Will you state also how many Members could be accommodated under the Strangers' Gallery if this alteration were made, and increased space given?—Forty-two, according to proposed alteration of House, and giving two feet to each seat, and increased space of about two feet eight inches from front to back, which is as much as the side seats of the body of the House have at present.

43. You

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43. You have submitted to the Committee a Plan for increasing the accommodation in the body of the House, by lengthening it to the westward; will you state what number of feet in length you propose to add to the present House?—Fifteen.

44. How many additional seats would the additional 15 feet afford, allowing three feet four between them and two feet in width?—It would afford 100 seats, upon the increased length of the seats at the sides of the House, including the galleries, supposing the seats under the Strangers' Gallery to be arranged in the same way as they are at present. There would be no seats entirely new, but a prolongation of the old ones.

45. How many Members in addition would it contain, without the increased accommodation to each Member which you propose?—One Hundred and Twenty-eight.

46. Does that calculate shutting out strangers entirely from that space?—No, not under the Gallery. I did not attempt to calculate on any alteration of that kind.

47. What is the length of the House from Solomon's Porch, the eastern door behind The Speaker's chair, to the gangway as it now is?—It is 49 feet 6.

48. With the addition you propose to make, what will then be the length?—Fifteen feet more.

49. Making the whole 65 feet?—Yes.

50. Will you state how many Members can be accommodated, supposing the alteration made, and the same space continued as is now afforded for each Member; and also state how many could be accommodated, supposing that alteration made, and allowing the additional room which you have considered necessary for seats?—Five Hundred and Ninety, supposing 18 inches to each seat at present, both below and in galleries; Three Hundred and Ninety in the other case; and exclusive of seats under Strangers' Gallery in both cases.

51. Is there any other mode by which you propose to add to the accommodation of the House?—I am not at present aware that there is; unless by taking two or three seats from the front part of what would become the Strangers' Gallery. Supposing this alteration made, that Gallery would be much deeper, and two seats might be taken from it, and those two seats of course might be added to the Members' Gallery, and would be at right angles with the seats at present on each side of the House in the Members' Gallery. There would be one inconvenience in that, which is this, that it would not do to put the Members into those seats without a high wooden back to those seats, so as completely to separate them from the Strangers' Gallery; and if you give to the Strangers' Gallery the same advantages as it at present possesses, the seats behind the backs of the Members' seats must stand still higher than would otherwise be necessary.

52. Then those seats could not be taken, giving the same convenience to strangers as at present?—If the convenience of strangers is to be considered, I should say they ought not to be taken in.

53. Is there any other suggestion you can offer for adding additional accommodation to Members in the body of the House?—I think none.

54. Will you state how many Members can be accommodated in the Side Galleries of the present House as now existing?—One Hundred and Fifty, reckoning 18 inches to each seat.

55. Will you also state how many could be accommodated in the two Side Galleries, supposing the additional space given the same as in the body of the House?—One Hundred and Twelve, leaving the present number of seats, and giving two feet to each sitting.

56. With regard to ventilation, do not the present Galleries of the House render difficult the House being ventilated equally?—I should think so, certainly. I think the Galleries are very much against the perfect conveyance of sound, inasmuch as they injure the natural elasticity of the atmosphere, by confining the heat occasioned by the respiration of a number of persons, warmth of body and woollen clothes, in that situation, all of which are calculated to impede the smooth progress of sound, by decreasing the elasticity of the atmospheric air.

57. Do not they re-act as sounding-boards?—I should doubt it very much: if those ceilings were horizontal throughout, they might be likely, at that small distance above the head, to reverberate the sound; but with the form which they have over the back seat, and meeting the wall at an acute angle, as they do, I should very much doubt their having that effect.

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58. In a room crowded as the House of Commons frequently is, after two or three hours, will not the air (free ventilation being prevented by the present galleries) be of different qualities, and also of different heats; will it not become hotter in one place than in another?—Of course it will be liable to that; the heat will increase less near the apertures through which the external air may be admitted, than it will in other parts.

59. Can any means be adopted to render the ventilation completely equal in the House beyond those that have been employed?—I apprehend that it would be very difficult to do that with exactness; but I think provision might be made to render the atmosphere of the House tolerably equable.

60. What effect, supposing the present flat roof carried 12 feet higher than it now is, would it have with respect to the sound of the voice being heard?—I do not think it would necessarily injure it; because the sound ought, by its progressive and spherical expansion, as wafted along by the fluid which conveys it, to reach the ear with all the distinctness of its first impulse, without reverberation from the ceiling, and because there are many buildings which are very much higher than the House would then be, and in which the voice is very distinctly heard, without any extraordinary exertion.

61. Do you speak of buildings with galleries, or without?—I have in my mind particularly the Gothic cathedrals, in many of which one hears very distinctly.

62. Which do you consider to be the best roof for hearing, a flat one or an arched one?—As far as one can judge from any principle, one would certainly suppose a flat one, provided it shall be within a distance capable of aiding the propagation of sound by direct reverberation.

63. What effect would that have upon ventilation?—I think it would certainly tend to make the House considerably cooler than it is at present, inasmuch as the heated and impure air would have further to go, and a larger space to occupy, before it could be driven back again from the roof.

64. Have you not some idea of a contrivance to prevent its being driven back at all?—By giving it a free outlet around the edge of the ceiling, or in different parts of the ceiling.

65. Do not you think this raising the ceiling to the height of the old building would be injurious to the sound?—I should not apprehend any harm from that; because if the sound is not heard before it reaches that part, I doubt that you would have it with distinctness if reverberated from such a distance above its original impulse; if, after travelling so far, and producing so many vibrations in its original undulating course, it were to be reverberated with considerable strength from a lofty ceiling, I should fear irregular collision between the particles of the fluid which constitutes the vehicle of sound, and a consequent indistinctness and confusion on its arrival at the ear.

66. In addition to that accommodation from lengthening the House, do you not propose to have a Gallery outside the House, in order that Members may come to their seats without coming up the body of the House?—A passage around the House.

67. Supposing it was determined to carry into effect those improvements which you have now stated, of lengthening the House 15 feet, and carrying a passage all round, what is the estimate at which you consider it could be done?—£. 6,900, excluding the roof, and not including any alteration in the ceiling, excepting to make good the present ceiling at the increased length of the House.

68. The estimate includes the new seats, the passage all round, and the new works that would be requisite in the adjoining offices connected with the House?—Yes.

69. In making those alterations, what offices would you interfere with?—The Vote Office, the Clerk of the Fees Office, and the Engrossing Office.

70. Would you require to remove them?—Yes.

71. Where do you propose to place them?—I propose to place the Vote Office where the present Engrossing Office is, and to erect a new building, between the present Engrossing Office and the Library staircase, for the engrossing clerks.

72. In that case, how would you light the Long Gallery?—By raising the windows, which the building would very well admit of, and putting a light, carried to the same height as the windows, over the door which would lead into the new Engrossing Office.

73. Does

73. Does the amount which you have now stated, of 6,900 *l.* include all those buildings?—Yes, as well as the new office for the Clerk of the Fees, over the kitchen belonging to Mr. Ley's house.

74. If this were effected, what alteration would you make in the present Lobby?—The present Lobby would then be about one half in the House, and the other half would still remain out of the House, if the end of the House were to come in a line with the door leading to the Long Gallery.

75. How do you increase the size of the Lobby for the convenience of strangers?—By making a large opening in the original west wall of the Chapel into the smaller Lobby that is now immediately on the outside of the larger Lobby, and connecting those two with the present lower Lobby opposite to the door of the House of Lords, raising the floor of that Lobby to a level with the floor of the House of Lords, so that the whole space of the Lobby would be from the east side of the doorway going into the Long Gallery to the west side of the present lower Lobby.

76. What is the difference of level between the entry to the House of Lords and the entry to the House of Commons?—If you are coming out of the House of Lords to go into the House of Commons, you would first of all come down six steps and then ascend eleven.

77. Do you know in perpendicular height what that is?—I do not carry in my mind exactly; but the steps are about six inches on an average.

78. Then that would make a difference of between two or three feet?—Thereabout.

79. Where would you make up the rise for the difference of the level?—By steps in the middle of the Lobby, at the line now occupied by the screen in the lower Lobby.

80. Is there no danger in removing so large a portion of the original wall of the Chapel as you would then be obliged to do, in order to increase the Lobby?—There would, unless it were done with proper care, but, with proper care, none at all.

81. Does any portion of that wall support the roof?—There is very little weight upon it from the roof; but it is a large mass in itself, and the two doors that now stand in that position occupy a very large portion of the opening proposed to be made: there would only be two or three feet more on each side to remove.

82. Are those doors in the western wall of the Church arched?—They are pointed arches, with a slender pier between.

83. What would the size of that Lobby, when completed, be?—It would be 43 feet long by 33.

84. What is the size of the present Lobby?—It is about 33 feet one way and 30 the other.

85. Then there would be an increase of 10 feet in length to the Lobby?—Yes, thereabouts.

86. With regard to the light of this new Lobby, will not there be an external window in it?—The greater part of the west side of the lower Lobby consists at present of window, and would continue to be window.

87. Will that give an opportunity of ventilation?—Ample ventilation, I should apprehend, for the Lobby.

88. Are all those alterations which you have stated, included in the estimate to be made at the expense already given?—Certainly. In stating the sums to the Committee, I have stated sums for which I have not the least doubt that I could find the most responsible person to contract.

89. The Committee are to understand that this expense takes in only useful alterations, and no alterations for the sake of decoration?—Yes.

90. Do you consider that it would be right, if the House were lengthened 15 feet, to continue the ceiling at its present height?—Totally wrong, I should think.

91. What expense would be incurred in raising the present roof, and extending it?—That of course would depend upon the design of the roof; I have submitted three different Designs to the Committee. I cannot myself suppose that the form of the roof is of primary importance as to the sound; the great object is, that the building should be in such a shape that the sound should travel readily round it. I have submitted to the Committee three Forms in which the roof may be made; the one that comes nearest to what I conclude the original roof must have been, would cost, to do it in the best manner, about 5,900 *l.*

92. Will

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92. Will you state whether you think it would be injudicious and inexpedient to adopt that?—I think it would; because it would be impossible totally to prevent lateral pressure ultimately, if even at first, with a roof of that construction; and the thing to be principally guarded against with those old walls, the buttresses of which we know to have been very much mutilated, would be lateral pressure. One of the others, the least ornamental of the three, No. 2, would cost 2,767*l.*

93. That is nearest to the present flat roof?—Yes; but supposing it to be raised to the full height of the building.

94. Does that include completing those walls?—Except as to any internal decoration upon the face of those walls; that is not supposed to be touched.

95. What estimate should you make for filling it up?—I supposed that it was intended to cover the whole in a temporary way with mere baize, until it should be reinstated; that I supposed to be Colonel Trench's intention, but on that point I appear to have been mistaken.

96. Would not that be a complete damper to the sound?—It would certainly be no advantage to the sound; but my idea is, that any thing at that height is of minor importance to the sound. Then the third, No. 3, would amount to 4,135*l.*

97. Do you calculate the wood to be used in the building to be oak, or what?—No, only the part which is technically called the king posts, all the rest would be fir, the best Baltic fir, painted.

98. What was the expense of that very richly wrought fretwork at the outside, at the restoration of King Henry the Seventh's Chapel?—About 36,000*l.*

99. Suppose the galleries and seats, and the present House, to be converted into a lobby or open space, what would be the expense of reinstating the inside as it was in ancient times?—The only opinion that I can possibly give at the moment would be, with reference to the external restoration of King Henry the Seventh's Chapel, such a sum as did the one, would, I think, certainly do the other.

100. The whole of the present House of Commons is cased with oak wainscot. Is not oak wainscoting particularly favourable to resonance?—Certainly, I consider that wood has that property more than any thing else; that it is capable of conveying clear and beautiful sounds is proved by the effect in musical instruments; but I am not of opinion that oak is the *best* wood for that purpose.

101. Is it not probable that one of the reasons which induced those who made the present House of Commons, to case it with oak wainscoting, was that circumstance?—No, I should think not; it was a kind of lining much in use then.

102. Do not you think that if the House were raised, and the upper end of the House were not covered with the same kind of wainscoting, the effect of sound would be materially diminished, especially if the House were lengthened?—I certainly should not think it advisable, with reference to distinct sound, that one part of the walls should be covered with one material and other parts with a different material; but I am not at all sure that the sound might not be as well heard in the House if there were no oak lining at all, as with that lining. I speak of oak particularly, in contradistinction to fir. According to my own opinions, as to the propagation of sound, I should prefer a lining of deal to a lining of oak, because deal is more elastic, of a more uniform figure as to its grain, and consequently, I conceive, more capable of that vibration which produces tone, and therefore better adapted to resonance. I should think certainly it would be better with a lining of deal than without; at the same time I think all those matters are connected with so much uncertainty that it is impossible to be sure that the sound might not be as well conveyed upon a stone wall as upon a wooden lining; for its conveyance is liable to be affected by a variety of causes, many of which it is evident have never yet been ascertained.

103. Your experience of Drury Lane leads you to think that wooden lining is better than stone?—It certainly goes to confirm the theoretical principles upon which I arranged Drury Lane Theatre, inasmuch as when it was first opened, and before they altered the proscenium, the sound was very distinctly heard.

104. You have given an opinion, in the early part of your examination, that the places under the Gallery were very badly situated for sound. Are they not as well situated in that respect as in a theatre?—In the first place there is a great deal more of inequality of surface behind the seats in the House of Commons, than is usual at the back of the boxes of a theatre, and the soffeits or ceilings under the Galleries of the House of Commons terminate at the wall in a more acute angle than is generally the case with the soffeits or ceilings of the boxes of

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our theatres. There are deep recesses at the back of the seats in the House of Commons. I conceive that nothing can be more injurious to the propagation of distinct sound, than such interruptions of the surface of the walls. The effect which we all know is produced in the whispering gallery at St. Paul's, would certainly cease, if deep recesses were to be formed in the wall of that gallery. At Drury Lane the wall is cased with thin deal.

105. You consider, therefore, that that wall is a conductor of sound to the boxes?—I suppose the surface of it to be so.

106. Since the alteration which has been made in Drury Lane Theatre, are you aware whether the sound has been very much injured?—Decidedly; you cannot hear now better, if so well, I think, as at Covent Garden.

107. You have made the theory of sound a peculiar study, have you not?—A good deal I did at that time.

108. Supposing the Committee to determine on the erection of a new House, are you able to point out, from your knowledge of the locality, any spot of ground in which it might be placed in preference to any other?—There are two spots which have occurred to me as eligible for the purpose; the one is directly to the east of the present House of Commons, converting the present House into a Lobby to the new one; but the objections to that appeared to me to be, that a building placed in that situation, and close to the present building, would entirely destroy The Speaker's present dining-room, and very materially interfere with the light and air now obtained at the east end of the House of Commons, and which would be worth retaining if that House were converted into a Lobby. The other situation which has occurred to me is upon the south-east quarter of the present House, on the site of the house now occupied by Mr. Ley, and in part or altogether, as might be, upon the garden belonging to that house.

109. That is to say, being due east of the Long Gallery?—Yes, both east and south, as relates to the present House; but still making the present House a Lobby to the new one. Perhaps the communication in that case between the Lobby and the new House might not be quite so handsome and imposing as if the new House were placed immediately to the east of the present one; but I think it might be so managed as to render the communication between the House and its Lobby perfectly convenient and exceedingly handsome.

110. Is the destruction of The Speaker's dining-room the only objection that you see to the former site?—No, another very material one is the interference with the light and air at the east end of St. Stephen's Chapel.

Lunæ, 19° die Septembris, 1831.

Sir *Jeffry Wyatville*, called in; and Examined.

Sir *Jeffry Wyatville*.

19 Sept. 1831.

111. WITH regard to the accommodation of the House of Commons, what do you consider to be the space to be allotted to give convenient sitting-room to the Members of the House?—I should like to allow two feet; but 22 inches is a fair sitting to allow in dividing benches.

112. Twenty inches is the space allowed in the chapels?—Yes; but when you are going to sit for so many hours, you want more than that.

113. In saying two feet eight inches from back to back, do you mean also to allow room for Members passing and repassing?—No.

114. From the back of one seat to the front of the next seat, what space do you think would be sufficient to give ample accommodation for gentlemen's legs, and to allow for Members passing?—Three feet; but four inches more would make a great difference as to comfort.

115. Do you consider that two feet eight is too small a space to admit of Members sitting, and others passing and repassing?—Yes, I think it is.

116. Will you have the goodness to state what your idea is of the possibility of making the present House of Commons available for the purposes proposed by the Committee?—I propose to make a recess on each side, the width of two old windows and the pier betwixt them, say 30 feet, by taking away the second pier from the east end upon the north side of the House, and carry the recess back to the

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the cloister-wall, and over the roof of it to the north side of the Speaker's cloister adjoining the House, which would give the depth of the recess about 30 feet on that side. On the south side might be made a similar projection into Cotton-garden. I think I may venture to say that there appears no great obstacle to either of these. I leave the present ceiling of the House as it is, and carry up the proposed two recesses as high as the tops of the old windows, admitting those or similar windows on the outer wall of those recesses.

117. Do you propose to carry the galleries round the recesses?—There may not be any occasion for that; it must depend upon how the spaces may be divided for seats; but I may say, if necessary for gaining space, a gallery might be carried partially round the proposed recesses; those recesses being the width of two of the old windows and the pier betwixt, would give light and ventilation. Of course it would entirely omit or set back, if necessary to continue a gallery there, the parts of the present gallery that are in front of and the width of those recesses.

118. To what extent should you throw the recesses back?—Sixteen feet to the cloister-wall, and over it 12 feet to its north wall, making in the whole about 28 feet: thus, on each side of the House a recess about 30 feet by 28, or if added together, 60 feet by 28, which is nearly equal to the whole space at present within the walls.

119. Would that be under a gallery, or open to the ceiling of the House?—I thought of keeping up the connection of the gallery round the recesses. Then suppose the chapel to be restored hereafter, I consider that it would be a much handsomer building in its appearance if these parts went back; as I propose to throw back two windows out on each side, the second and third from the east end, so as to make the House a cross; or by taking a small part of The Speaker's house, and a similar space on the south side, the first and second windows and pier betwixt might be taken instead of the second and third.

120. Have you any idea of what the expense of that operation would be?—No, I have not at all turned my mind to it: the idea was formed only yesterday, on studying the plan of St. Stephen's as published by the Antiquarian Society.

121. Have you turned your mind as to what the effect would be with regard to hearing?—I do not think there could be a doubt that you would hear fully as well, because you would have a great width given to the House, and the present ceiling remaining, would act as a sound-board.

122. Some of the Members would not be within view of The Speaker?—I only propose to carry a gallery round on one side of each recess, if necessary, and then all the Members might see The Speaker. This scheme would enlarge the House, and keep the Members compact, in the cheapest possible way, perhaps.

123. Do you contemplate any passage outside the House?—Not if this design is supposed to be only a temporary sort of accommodation.

124. If you took out those two windows upon each side, would not the probability be, that it would be nearly re-building the old chapel; must you not re-construct it?—I should not take off any part of the roof at all; I should leave the ceiling as it is; I should bring a flat over the windows, and I have only to carry the present ceiling and roof where the wall or pier would be removed, and there is ample space betwixt the ceiling and roof for a strong truss to carry both.

125. What space is there between the side wall of the chapel and the external wall to which you intend to come?—I took it to the inside, and it is about 16 feet, and over the cloister to the wall next to the quadrangle, 12 feet; total 28 feet for the recess from the inside line of the House.

126. You do not contemplate the lengthening of the House at all?—Not according to this design; but it does not prevent the lengthening of the House to the east, or of extending the gallery to the west.

127. What additional accommodation, as to numbers, do you contemplate that would give?—I made about 140 additional, I think, allowing 2 feet for each Member, and 3 feet 3 inches from back to back of the seats.

128. Does your Plan embrace a new Lobby?—No; I have made no plans, excepting the rough Sketch now shown. I also suggest the possibility of making another handsome approach to the House for the Members, without going through the Lobby, by a staircase at the end of Westminster Hall, which might also connect with the present staircase opening from Palace Yard; the staircase from Westminster Hall might communicate with the south upper cloister of The Speaker's house, leaving that and the space between the cloisters and the north wall of the House of Commons for the use of the Members only. This, of course, would require

require a little alteration at the end of The Speaker's house. It would be possible to come in at the lower old door, formerly opening to Westminster Hall, and up a staircase, if it were desirable; but it would not be so handsome as the other way.

129. What was the original height of the pavement in the upper part of Westminster Hall; was there any Dais at the end of it?—I should think most likely there was, originally; but I do not think there is any traces of it. The floor of the Hall has been raised twice.

130. You will of course get into the House by that entrance, by a great flight of steps from Westminster Hall?—Yes; the steps do rise a great height already, and there would be little difficulty; and by a gallery or landing across, the Members might communicate with the staircase next Palace Yard.

131. Do you think that the ventilation and the sound would be improved, or injured, by the plan that you propose?—I do not think it would have any effect at all as to the sound; and greater ventilation might be gained in the recesses, or pipes might be carried to the present ventilators.

132. Are you aware of Colonel Trench's first plan, of making a passage all round the House?—I have had an idea of that myself.

133. In your plan would not that be impracticable?—No; it was the first thing I thought of when I turned my mind to the House, whether I could not have got all the way on each side with a gallery on the outside, looking through the old windows opening into the House; but then much would not have been seen, on account of the piers.

134. The question refers to a passage outside the House?—I take the space between the cloisters and the walls of the House for that purpose, and would make a similar passage on the south side.

135. Shall you be enabled to give the increased width which you propose to the House, and also to have an outside passage which will go round the House?—There would be some difficulty about that, to make it on one level.

136. In order to obtain that, you take in the upper cloister of The Speaker's house?—No; I could make the passage betwixt the cloister and the House.

137. But you take that for the House?—The new part would be over the cloister wall, and therefore I should have a passage within the House, when the recesses would be at the outside; I do not want to go outside the recesses, but I could keep a communication under the seats, and then there would be less traffic in the House.

138. And you could walk all round the House?—Yes; a design might be formed with such a view.

139. And with facility of ingress and egress?—Yes. As to precisely the way it might be done, that is a consideration requiring study.

140. Which roof do you consider best adapted for hearing, a flat one, or an arched one?—I do not know that I ever made up my mind to that; when I have been in a church with an arched or a flat roof, I have heard equally well.

141. Have you any idea whether the hearing would be better or worse by the projection of these recesses; would the hearing be much injured by them?—Perhaps the contrary, for I think the present ceiling would act as a sounding board, by taking the wall away on each side.

142. Do you think if the ceiling were raised to the height of the old chapel, it would be injurious to the sound?—That is matter of experiment; I should think not.

143. In making the alterations you propose, would you interfere with any of the existing offices?—With some of the offices, especially if a separate passage is formed on the outside of the wall all round.

144. Have you contemplated the accommodation which you interfere with?—No; I think I should give as much accommodation as I take away.

145. Are you aware of the fact, that from 300 to 400 Members are on divisions occasionally contained in the present Lobby?—No; I have not considered the accommodation of the increase of the House further than I am now speaking of, of these two expansions on each side.

146. You have not therefore considered the increase of the Lobby with a view to the accommodation of such Members, where so many go out of the House?—Yes, I have taken it into my view; but I have not fixed in my mind the precise way in which that should be done, having been in town only two days since the notice of the Committee.

147. Are

Sir *Jeffry Wyatville.*

19 Sept. 1831.

147. Are you aware that in the greater part of the session the Lobby is filled with persons obliged to be there to meet Members on business, previous to the meeting of the House?—Yes, I have. In the varieties of ways in which I have looked at this, I have thought it possible, that by an alteration of The Speaker's house, the whole of the cloister might be given up to the Members as a Lobby.

148. What addition would you propose to make to the present Lobby?—Certainly you might carry into execution that part of the idea that has been before suggested; there is nothing in my design which prevents your carrying the Lobby back to the west.

149. With reference to the expense, and convenience of Members, do you think any alterations to the present House would be as desirable as the building an entire new one?—I have not the least hesitation in saying, that if it rested with me I should most certainly recommend a new one. In the erection of a new House, I should take into consideration the application of the cloisters and that part of The Speaker's house which embraces as far as the north cloister, for the necessary offices of the new House of Commons; and I should place the new House, of a proper form for seeing and hearing, on the eastern side of The Speaker's house, betwixt it and the river, leaving a proper area for light into offices for the House of Commons; moving part of The Speaker's house, of course, more northwards. I have also thought a magnificent combination might be formed by a passage straight through the present House as a Lobby, with a private passage on each side to a new House in the present garden.

150. Have you contemplated any other situation?—Yes, I have. I have thought that a magnificent House of Commons might be formed in the quadrangle of The Speaker's cloisters, leaving the cloisters round the House, with skylights or lanterns to compensate for the windows that would be taken away by the House itself, and the eastern side of the house at present used by The Speaker would become offices immediately adjoining the House of Commons; the present House of Commons would remain a great Lobby.

151. How would that be ventilated?—You may put the windows either upon the top or side.

Martis, 20° die Septembris, 1831.

Robert Smirke, Esq. called in; and Examined.

Robert Smirke, Esq.

20 Sept. 1831.

152. HAS Mr. Smirke made himself acquainted with the localities of the House of Commons?—Not particularly, I have not.

153. What do you consider to be the space to be allotted to give sufficient seats to Members, or what breadth would you allot to each Member to sit with full convenience in a place where they have to sit for a number of hours?—Certainly not less than 22 inches in width.

154. And from back to front, with reference to passing continually?—About three feet.

155. Do you think three feet would be a fair average?—I should think that would be an ample allowance.

156. Do you know the extreme width of the House?—I do not.

157. Taking the width of the present House to be 33 feet from pier to pier, and the length 50 feet, what number of seats, in your opinion, can that conveniently afford?—It is impossible to give an answer to that question without calculation.

158. What do you conceive to be the best shape of a house to admit of sound and accommodation in the smallest space?—Such a question as that I ought to have had given me to consider a little.

159. Do you consider that, lengthening the present House, retaining The Speaker's chair as it now is, would be convenient for the transaction of business, as far as hearing goes?—These are questions that involve rather speculative reasoning, and not relating to facts, and ought to have been given to me that I might have been prepared. If they related to facts, I could answer them.

160. It

160. It has been proposed to increase the accommodation of the House by adding 15 feet to its length; I would ask you what your opinion is as to the effect of that on the general convenience of the House for business, both as to hearing and room? —*Vide Mr. Smirke's Statement on September 27.* *Robert Smirke*, Esq. 20 Sept. 1831.

161. Do you think that lengthening the House of Commons would be injurious? —To a certain degree it would be injurious, unquestionably; there cannot be a doubt of that; injurious to the capability of hearing.

162. Would the prolonged length of the House of Commons, being 65 feet, be beyond the usual reach of sound?—I think not.

163. Would not the power of hearing, or the extent of hearing, depend upon whether there were any galleries or projections to interfere with the progress of the sound?—The projection of a gallery would diminish the extension of sound.

164. Taking the galleries at each side and the end as they now are, do you think that extending the House 15 feet, these galleries remaining as they are, would not very much impede the distinct hearing?—They would impede it to a certain degree, but I am not prepared to say they would make the House inconvenient.

165. Would not they impede the ventilation? --Not at all; if you make the galleries wider it would materially, but merely extending the length would not.

166. Do not the present galleries interfere with the ventilation?—Undoubtedly; very much indeed.

167. Do you consider that a house of that dimensions, with a gallery at each side and at the end, can, by almost any circumstances, be equally ventilated?— *Vide Mr. Smirke's Statement on September 27.*

The following Instructions were then given to the Witness:

Mr. Smirke is requested to examine the Plans of the House now submitted to him in its present state, and to consider, after a careful survey of the immediately adjoining buildings and passages, whether and in what way he would recommend alterations that could add to the extent of seatage, improve the ventilation, and facilitate the business of the House, as regards division and communication; and then stating at what expense these alterations can be made, including alterations, if any should be thought necessary, in the roof.

Martis, 27° die Septembris, 1831.

Robert Smirke, Esq. again called in; and Examined.

168. WILL Mr. Smirke be kind enough to state the result of his consideration of the question proposed to him?—I have examined the House and the adjoining buildings, according to the direction of the Committee, but I am not prepared to suggest any plan of alteration by which the objects desired can be effected. Upon examining the capacity of the present House, I find the whole length of the seats appropriated exclusively to Members to be about 700 feet, so that allowing two feet for each seat, as proposed by the Committee, it does not appear that more than 350 can be seated at the same time in the House in its present state. 27 Sept. 1831.

169. In that calculation do you deduct the usual accommodation for Messengers? --Yes; there are two seats for Messengers in the Galleries, and two seats on the floor are reserved for Counsel, when they are required to attend.

170. Do you exclude all them?—Yes; the length stated is that of seats for the Members only.

171. What is the amount of those you exclude?—The whole length of seats reserved for Counsel and Messengers is about 26 feet.

172. Exclusive of the Strangers' Seats under the Gallery?—Yes.

 173. Do

Robert Smirke, Esq.

27 Sept. 1831.

173. Do you include the Side Galleries?—Yes; I include, in the length stated, all the seats appropriated exclusively to Members. Many of these seats are only two feet and a half wide, from front to back; the largest is not more than two feet ten inches; the average would be about two feet eight inches.

174. Which you consider scarcely enough to allow a person to sit, and leave room to pass?—Certainly not to sit with ease for any length of time.

175. Have you also made a calculation how much it would hold, giving three feet from back to front?—No, I have not. It appears to me that the House would not be sufficiently enlarged to give accommodation to all the Members, even if the whole of the Lobby were added to it. Then, with respect to the inconvenience that is felt in the Lobby, from its insufficient size, I observe, that taking the area of the present Lobby, that also of the passage adjoining it, and of the inner or lower Lobby, the whole area of these together is not more than about 1,500 superficial feet; so that if they were all laid together, there would not be room for more than about 380 Members, allowing two feet square for the standing room of each Member. With respect to the communication between the House and the Lobby, that can be improved only by removing the offices which are now built against the walls of the House on each side: as these are offices in daily use, they must be built in some place having immediate connexion with the House or the Lobby, and I do not see any place where they could be rebuilt which would not require the removal of other existing buildings. Another difficulty also occurs in the different levels of the floors; for, if the Lobby were enlarged by adding to it the inner Lobby, raised to the same level, the floor of the present Lobby being rather more than five feet above that of the House of Lords, the access to the House of Lords in that direction must be closed. In consequence of these difficulties, I have not suggested to the Committee any plan for the enlargement of the House, believing that the Committee would not think it expedient to adopt any plan, involving a considerable expense, which would not improve their accommodation in all respects much more effectually than as it appears to me can be done by partial alterations.

176. What is the extent, in superficial feet, of the existing Lobby?—About 900 superficial feet.

177. The Committee wish to know whether, in case of the Lobby being extended as was proposed, and the Smoking Room being taken away and placed elsewhere, whether, in that case, such a new Lobby would not be much improved in point of ventilation?—It would not be much improved if a large part of the present Lobby were taken from it in order to enlarge the House, because the Smoking Room is over the present Lobby, not over the inner one, which it is proposed to add to the present one.

178. The Galleries of the House, as proposed to be enlarged, would be where the Smoking Room is now?—Yes.

179. But the ventilation might be obtained through the great window with the external air?—Certainly air might be introduced at that window, as it is now at a side window.

180. If the present ceiling of the House was removed, and an additional height of roof given, do you not think that would improve the ventilation of the House, and would it be disadvantageous to the sound in hearing?—It would improve the air of the House; at the same time it must to a certain degree lessen the facility of hearing in it. I do not, however, think that the room would be made too high by a moderate elevation of the ceiling.

181. Do you think the difficulty would be removed by the removal of the partial absorption of sound by the lantern?—I do not think the openings in the ceiling could be all removed without causing excessive heat and inconvenience.

182. The Committee wish to know whether, supposing the ceiling to be taken away, and a new roof, without an opening of that kind being established, whether the sound would be so good as it is now?—That would depend in some measure upon the height and form of the ceiling; but I do not think the House could be ventilated well without some opening in the ceiling.

183. Do you not conceive that the upper space in the roof is a very great convenience, for the purpose of ventilating the House?—I do not think the whole of that space necessary; but I think it indispensable that there should be some interval between the ceiling and the roof.

184. Has

184. Has it occurred to you that, in constructing a new ceiling, it might be removed from the walls, so as to have a continuance of opening all round, through which the heated air might escape?—If it is meant that the opening to allow the foul air to escape should be on the sides instead of in the ceiling, I am of opinion that the change would not be of any advantage.

185. Supposing a new ceiling, framed of wood laid upon blocks, instead of resting on the walls all round, would not the interval between the blocks afford an escape for the foul and heated air?—Not better than if the opening was in the centre of the ceiling. I do not think the air would escape more readily at the sides than in the middle; on the contrary, if the ceiling were slightly arched, so as to conduct the air to the centre, it would much more freely escape there than anywhere else.

REPORT

FROM THE

SELECT COMMITTEE

ON

HOUSE OF COMMONS BUILDINGS

TOGETHER WITH THE

MINUTES OF EVIDENCE

TAKEN BEFORE THEM.

Ordered, by The House of Commons, *to be Printed,*
6 *October* 1831;
And to be Re-printed, 19 *February* 1833.

REPORT

FROM THE

STANDING COMMITTEE

ON THE

LIBRARY OF THE HOUSE OF COMMONS;

TOGETHER WITH THE

MINUTES OF EVIDENCE,

AND APPENDIX.

Ordered, by The House of Commons, *to be Printed,*
30 *March* 1835.

Lunæ, 2° die Martii, 1835.

Resolved, THAT a Standing Committee of Sixteen Members be appointed, and be renewed at the Commencement of each Session, to assist Mr. Speaker in the direction of the Library, to whom shall be referred all matters relating thereto.

And a Committee was appointed, of—

Sir Robert Inglis.	The Lord Advocate.
Mr. Chancellor of the Exchequer.	Mr. Williams Wynn.
Mr. Spring Rice.	Mr. Warburton.
Mr. Littleton.	Lord Viscount Clive.
Sir Henry Hardinge.	Mr. Stewart Mackenzie.
Dr. Lushington.	Mr. W. E. Gladstone.
Mr. Secretary Goulburn.	Mr. Tooke.
Mr. Frederick Shaw.	Colonel Fox.

Ordered, THAT the Committee have leave to sit in Mr. Speaker's House, and have power to send for Persons, Papers and Records.

Ordered, THAT Three be the Quorum of the Committee.

Reports made from the Select Committees in 1830, 1832 and 1834, respecting the Library, referred to the Committee.

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REPORT.

I.—*State of the Library.*

I.—THE first subject upon which The House will naturally expect to receive a communication from your Committee, will be the state of the Library, as it was left by the Fire of the 16th October 1834. It is needless to state, that not only the rooms specially designated as The Library, but all the other Depositories of Books and Papers belonging to The House, within the precincts of the ancient Palace of Westminster, were, in that calamity, entirely destroyed. Nothing whatever was saved of that Collection of MSS. to which the Committee of 1832 had referred, as being found in the presses of the Long Gallery; not a single volume of that Collection of Tracts on English History, (a collection which may almost be said to have been discovered in 1832,) on the possession of which Sir Henry Ellis, the Chief Librarian of the British Museum, in a letter to the then Chairman of the Library Committee, congratulated The House. (Appendix to Report 1832, p. 37.) Every thing in the office of Clerk of the Journals perished in the same conflagration.

All the books contained in the Lower Library were, with very few exceptions at least, thrown from the windows into Cotton Garden, on the night of the Fire; and a large proportion have, in consequence, been saved; but the whole of the contents of the Upper Library, consisting of upwards of 2,000 volumes, presented by the French Government, and by the Chamber of Peers and by the Chamber of Deputies of France, and of those purchased in pursuance of the recommendation of the Select Committee of 1832, together with a variety of Historical Works, which had formerly been placed in the Lower Room, but which the annual increase of Parliamentary Papers had necessarily excluded from that room, were destroyed by the Fire.

A duplicate Collection of Parliamentary Papers, and a set of the Private Acts from the Year 1754 to the present time, which were severally deposited in the Committee Rooms Nos. 20 & 21 above the Library, were likewise destroyed.

Of the volumes which were saved, many sustained, as might be expected, considerable injury, and required re-binding.

The books which were saved have been carefully sorted and examined; and all deficiencies in the Parliamentary Papers have been supplied, with the exception of a few of the earlier papers previous to the Union, which are out of print: and that department of the Collection is now, with such exception, as perfect as it was before the Fire.

The other principal works of reference connected with Parliamentary business are complete, and occupy nearly the whole space appropriated to the present Library.

With respect to the General Collection in the Library, it is difficult to ascertain with accuracy the exact extent of the loss which has been sustained; since the Manuscript Catalogue, which had been carefully

compiled, and was ready for publication, and in which only were to be found the titles of the works purchased, or presented to the Library, since the compilation of the last Catalogue in 1829, was unfortunately burned. Nevertheless as perfect a list as under present circumstances could be made, both of the books destroyed and of those saved, will be found in the Appendix.

The three MS. Volumes (in folio) of the Catalogue of Tracts on English History have perished with the Collection itself; and no evidence of the contents of that Collection is now known to exist elsewhere.

Your Committee recommend that the original stock of the Library, according to the Catalogue of 1829, be, with such exceptions as may be found expedient, replaced, as furnishing a good and sufficient foundation for a Parliamentary Library of Historical and Constitutional information; and for this purpose, they suggest that a sum not exceeding 3,000 *l.* be placed at the disposal of Mr. Speaker, in the hope that he will be pleased to give such directions as to ensure the collection of the books in question being in readiness for the time when the new building may be prepared for their reception.

II.—*Arrangements for the New Library; and for the Librarian.*

II. 1.—The next subject upon which your Committee feel it to be their duty to report, is the arrangement for the New Library.

It will be in the recollection of The House, that there was no Library at all belonging to the House of Commons prior to 1818. In that year a room 17 feet 3 inches by 16 feet 9 inches, containing about 189 square feet, was appropriated by the late Speaker as a Book-room for the use of Members.

The late Library, which was built in consequence of a Report of the Select Committee of 1825, was 55 feet long, 23 wide, and 13½ high, containing about 1,265 square feet. Even this accommodation, though so greatly increased compared with that previously provided, was so limited, that the Library Committee, in 1830, reported on the necessity of enlarging the room. Their recommendation was not, indeed, immediately followed up; but in 1832, after consideration, by The House, of the Report of the Committee of that year, the rooms Nos. 18 & 19, being together of the same size as the Library, were appropriated to the same general purposes; and an outer-room, or lobby, was taken off the staircase of the Lower Library. The Library thus enlarged, occupied in length of floor 110 feet by 23 feet wide; and of course a double area, containing about 2,530 square feet, was thus provided, besides the outer Apartment.

It would be convenient in a new building, that this extent of room should be on one floor. The Committee cannot enter on the suggestion of the dimensions and arrangements of a new building without adverting to the fact, that in all previous Reports of the Library Committee, the anticipations of a progressive addition of books and papers have uniformly fallen short of the actual increase; and therefore it may become necessary, in the construction of the new building, to provide some means either for extension of space, or for the adaptation of Committee or other rooms for the reception of additional books, as occasion may require.

If, in addition to the Library, there were a room of 50 or 60 feet in length, which should intervene between the Library and the House, to be called the Members' Writing Room, three objects would be gained:—1st. The House would have the use of a room set apart exclusively for the accommodation of Members desiring to write; an accommodation not provided in the Old House: 2d. Space would be afforded for the increase of books, as there could be no objection to this room being

being lined with shelves: 3d. As this room, being placed between the Library and the House, would necessarily be more convenient for the purpose of letter-writing, it would in that degree prevent a custom which has generally been deprecated, of The Library being a letter-writing room: and a lobby, or intermediate space, should also separate The Library from this apartment. In the event of this arrangement being adopted, no Post-boxes should therefore be admitted in The Library.

The Library itself should be divided into two parts, each of about 60 feet in length, and wide and lofty in proportion: the Outer, containing all such books as are of immediate use for the service of Members individually, of Select Committees, or of The House itself: the Inner Apartment should be appropriated to such other books of less general reference as the Library may contain, and be considered a room where those who are reading, or otherwise desire quiet, may be uninterrupted, either by conversation, or by those applications to the Librarian for information, which necessarily interfere with the silence of a place of study.

II. 2.—*Arrangements for the Librarian.*

The Committee of 1834 reported to The House on the expediency of giving apartments to the Librarian, for a residence. This Report was referred by The House to the Committee, then sitting, on Official Houses; and that Committee reported on the expediency of giving a house in Cotton Garden, then in occupation of a tenant at will, for the purpose of a residence for the Librarian: and the last Government is understood to have been prepared to carry that Report into immediate effect.

The late Fire has altered the expediency of using this particular house for the purpose; and your Committee accordingly suggest, that the accommodation of a residence adjoining the Library, in any new building, ought to be secured—suitable to a person with an income of from 500 *l.* to 600 *l.* per annum; such accommodation being already provided for the Librarian of the House of Lords, and for the Librarian of almost every other public establishment.

Your Committee feel it, further, right to recommend, that the views of the Library Committee, and of the Official-Houses-Committee, be so far carried into effect, that an allowance of 120 *l.* per annum be made to the Librarian, commencing from the present Session, at the close of which one payment will be due, to continue until the accommodation proposed by your Committee can be arranged.

III.—*Arrangements for the Papers of the House.*

Your Committee proceed, in the third place, to consider the means by which the Records of Parliament, and the Proceedings and Papers of this House, may be rendered most conveniently accessible to Members.

III. 1.—*General Index to the Public Acts.*

The General Index to the Public Acts 1801–1828, was compiled by the late Mr. Spiller, and printed by order of the Treasury. A MS. Index of each succeeding year was incorporated by the Librarian, which produced accordingly a continued Index to the end of the last Session of Parliament. This Work was executed by the Librarian for his own assistance in the discharge of his duties in the Library; and a duplicate was made for the Table of the House. These MSS. are both destroyed; and in the judgment of your Committee, ought immediately to be replaced. Mr. Vardon has, therefore, been directed to repair the damage which has been sustained, with the least possible delay.

III. 2.—*Index to Local and Personal Acts.*

In the Evidence taken before the Select Committee 1832 (Question 50), Mr. Vardon was asked, whether there were any Index to the Local and Personal Acts: he answered, "that there was no General Index; but that in 1829 Mr. Spiller wished very much there should be one: and while I was under Librarian, he formed a plan of the way in which he wished it to be made: and I commenced working on that system, and have brought it down in MS. till 1827; but it yet wants arrangement and examination."

In paragraph 40 of the Report was the following recommendation: "Your Committee further submit to The House the expediency of directing an Index to be prepared and printed, first, of the Private Acts, from the earliest date; secondly, of the Local and Personal Acts, from the earliest date: similar to that prepared by the late Mr. Spiller, to the Public Statutes from 1800."

The Committee of 1834 report, "that considerable progress has been made in the Index to the Local and Personal Acts; the completion of which Index was also recommended by the Committee of 1832: it is probable, that by the close of next Session, it may be in such a forward state as to be ready for press."

The work in this state was consumed in the Fire of the 16th October.

The extent of the labour applied to this work can be best estimated by the fact, that the number of Local and Personal Acts, the titles of which had been copied and arranged alphabetically, designating also the nature of the enactment, amounted to 7,504; being the number passed from 1797 to 1833. The private Acts from the year 1757 to 1800 had also been arranged in alphabet, to the number of 3,738; making in all, 11,242.

Your Committee cannot but feel, that though, in consequence of the recent calamity, The House of Commons has not before it the Index in question, and therefore has not any direct consideration for any grant of money in relation thereto, yet, a work of great importance having been executed under the orders of The House, and being, up to a certain point, ready for the service of Members, and being, not in the private dwelling of the Librarian, but within the precincts of The House, when it was consumed by fire, it is fitting that the Officer whose labour was thus, without any fault on his part, destroyed, should not be suffered to lose the fair and legitimate payment for the work thus done in the public service. Your Committee therefore recommend, that a sum not exceeding 300 *l.* be placed at the disposal of Mr. Speaker, in order to enable him, at his discretion, to pay the same, or any part thereof, to Mr. Vardon, for his past labour in the matter; and that Mr. Vardon be directed to resume the compilation of the Index, as soon as circumstances will permit.

III. 3.—*General Index to Sessional Papers.*

The Committee of 1834, in alluding to the useful Index (compiled under the direction of Messrs. Hansards) of the Papers, Bills and Reports, printed by order of The House, 1800–1832, recommended that Messrs. Hansards be directed to pursue, for the formation of a General Index to the Sessional Papers, printed by order of The House, in future years, the same plan as that followed by the Librarian in regard to the General Index to the Journals: so that, at any period, when the Papers, ordered to be printed by The House, should have assumed such a bulk as to be difficult of reference by annual Indexes, a similar publication might be ready for printing; and thus, when such a convenience might be deemed expedient, the delay otherwise incident to the completion of a General Index might be avoided.

Under

Under the order of Sir Charles Manners Sutton this Work was begun; and the consolidation of the annual Indexes is commenced.

III. 4.—*Index to Reports.*

The Committee of 1834 reported, that "The value of the arranged series of Reports 1801–1826, has been so generally appreciated, that Your Committee have directed that this series should be completed to the end of the present Session; as in these Reports (to quote the words of the Committee of 1832) there is much valuable information rendered unavailable from the absence of any means of reference to the Appendixes, Your Committee recommend, that an Index, to such materials from 1800, be compiled, similar to that prepared by Messrs. Hansards for the collection of Reports dated prior to 1800. This Index, extended to the present Session, might be accompanied by such Notices of the Reports themselves as would form a general means of reference to the whole series, comprehending not less than 200 Volumes."

The latter part of this recommendation had been adopted to some extent; and the Indexes in MS. had been laid on the Table of the House, and on the last day of the last Session were ordered to be printed; and had been deposited in the Library, previous to their transmission to the Printer. They remained in the Library at the time of the Fire, and were unfortunately consumed. On their loss being represented to the Speaker (Sir Charles Manners Sutton), immediate steps were taken by his direction to recompile the same; and although their production in print is thus unfortunately retarded, your Committee hope that The House may be in possession of them before the close of the Session.

III. 5.—*Collection of Reports, and Digest.*

Messrs. Hansards have also been employed in collecting the Reports subsequent to 1826 into such a series as shall form a Second Part of the Collection from 1801. This Work has been retarded, owing to the pressure of business occasioned by the destruction of The Houses; but it is expected that by next Session the Collection will be complete.

The delivery of the Digest of the subjects of the Reports will be delayed by the destruction of the Indexes, which were intended to form part of the same volume; but fortunately the MS. of the Digest was preserved. The delay, however, will enable the Printer to extend the List, so as to comprise some Reports of a recent date connected with the same subjects.

III. 6.—*Current Index to the Journals.*

The Select Committee of 1823, on the General Index to the Journals, in recommending this work to be continued, reported as follows: "It is highly expedient, that, after every Session, the Index of each Volume should be incorporated with that of all the preceding Journal Indexes subsequent to the 75th Volume (as before stated by Mr. Rickman, in p. 3); which will afford the means of reference in the interim, and tend very considerably to expedite the formation of another Volume of the General Index, whenever it may be requisite to print it."

Such Index was, accordingly, formed by the Librarian, under the recommendation of the Committee on the Journals, with a view to its being printed every 20 years; and, happily, this MS. was saved from the flames, with little injury.

It forms an Index to the Journals from 1820 to 1833 inclusive; 1834 being still to be incorporated.

The Volume forming the General Index from 1801–1820, contains 1,072 pages; but there is no doubt that the present mass of Index, if arranged for the press, will exceed that amount, though embracing a period of no more than 15 years; viz. 1820–1834.

It may be remarked that the Current Index is formed by incorporating the Annual Index at the close of every Session; and the following Comparative Table shows the great annual increase of Index-matter, occasioned by the growing business of the House of Commons:

Volume of Journals.	Last Five Years of Current Index, 1801–1820.	Number of Pages of Annual Index to Journals.	Volume. of Journals.	Last Five Years of Current Index, 1820–1833.	Number of Pages of Annual Index to Journals.
71st.	1816	53	84th.	1829	80
72d.	1817	48	85th.	1830	110
73d.	1818	54	86th.	1831	164
74th.	1819	72	87th.	1832	116
75th.	1820	70	88th.	1833	137
	Pages	297		Pages	607

This table displays not only the great length of the Index, as compared with the former period, as a total, but also the annual increase of the business transacted by The House; and assuming the above calculations to bear, more or less, upon the whole period from 1820 to 1834, it is manifest that the bulk of the General Index already exceeds that of the preceding volume. The proportion, in point of fact, is 1,403 for 15 volumes, to 1,012 for 20 volumes; but if the incorporation were to be continued to 1840, the publication would extend to a greater number of printed pages than are readily available for the purposes of rapid search in a single volume; while, on the other hand, the inconvenience of any Index exceeding one volume, is apparent to all who are in the habit of consulting works of this nature.

Your Committee, therefore, recommend, on the present occasion, a similar course to that pursued when the last General Index to the Journals was under consideration [Report of Journal Committee, 1818,]; namely, that subject to the authority and control of Mr. Speaker, the Index be completed and printed. Your Committee also consider that this work should be conducted under the responsibility of the Librarian, who has annually incorporated the Index of each year into the general volume: and that, for the purpose of defraying the expense of the said work, such advances should be made, from time to time, as Mr. Speaker may recommend.

Your Committee, after having submitted this Table and Statement to The House, think it right to notice, that the sum paid to the Librarian for the formation of the Index in 1820, was 120*l.* per volume; and that if the said sum of 120*l.* were considered a fitting remuneration for the labour of the five years in the first column, it cannot now be considered as proportionately adequate, when in the last five years the labour has literally more than doubled.

Your Committee recommend, accordingly, that the payment for the compilation of the Index, commencing from Session 1834, be 200*l.* per volume.

IV.—*Accommodation in the present Library.*

Though till the year 1818 the House of Commons did not possess any Library, and though the present Library (36 feet by 19) is more than double the extent of that which in that year was provided, yet the experience of the intermediate accommodation has been so much valued, that your Committee have reason to know that a strong desire is felt by many Members to obtain a larger space, even in the present temporary House, than is already provided for the purposes of the Library. They have examined Sir R. Smirke, and from his evidence, it appears that it is possible to provide such space, by throwing the three rooms adjoining the Library on the North, and the passage on the West of those rooms into the present Book-room: and, in that case, he would build, at an expense not exceeding 600 *l.*, on the area to the South of St. Stephen's Chapel, three rooms nearly contiguous to the Lobby of the House, and on the same level.

It appears by the evidence of Sir Robert Smirke, that he has been examined before another Committee on the practicability of building another room, to the South of the present House, for a distinct purpose; and in the event of that proposition being adopted, which would require 1,200 *l.*, it has been suggested, that such room might be, also, used as a Members' Writing-room. In this case it would be unnecessary to increase the Library, or to remove the offices in question.

In either case, the extra space might be considered as the room where only should be provided accommodation for Members to write their letters; and, in either case, the present room should be considered as appropriated to Books and Reading only.

30 *March* 1835.

LIST OF WITNESSES.

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Jovis, 26° *die Martii*, 1835.

Sir Robert Smirke - - - - - - - - - p. 15

MINUTES OF EVIDENCE.

Sabbati, 21° *die Martii*, 1835.

MR. SPEAKER, IN THE CHAIR.

Thomas Vardon, Esq. called in; and Examined.

Thomas Vardon, Esq.

21 March 1835.

1. AS Librarian of the House, you have, of course, turned your attention to the accommodation provided, and to be provided, in a Library for the Members of the House?—I have.

2. What division do you think ought to be made in the space to be allotted to the Library in any new building?—The best idea I have formed for the most convenient arrangement of the Library for the use of the House, was a division into three parts; a large outer room, immediately connecting with the House, or the space of 50 or 60 feet in length, which could be more immediately used as a Members' Writing-room, thereby avoiding what has been much complained of, namely, the using the Library itself for the mere purposes of a Post-room. The second division I would call the Parliamentary Library, the business of which room being conducted, necessarily, with more noise and conversation than is agreeable to those Members who are writing reports of select committees, or reading, I would confine entirely to the second room: and the third, containing the literary portion of the library, should be considered as a room in which no conversation was allowed, that those Members who were really reading or writing reports, should have the convenience of a quiet apartment for that purpose. The two rooms forming the Parliamentary Library and the inner reading-room, should be equal in extent with the Writing-room, with the addition of a Messenger's Lobby between the Writing-room and Library.

3. How do you distinguish the duties of attending as a librarian to the Parliamentary Library from the duties of attending any other public library?—The distinction is very strong in practice when properly worked out. My duties, as attending the parliamentary department of the Library, I consider to embrace the attendance on Members generally, or select committees specially, and upon the House during the progress of public business. The attendance on Members generally is rather indefinite, but it amounts in fact to this, that to the extent of time which I can give, which is day and night during the sitting of the House, the practice is, that there is no subject connected with parliamentary business, on finance, or the forms of the House, or the progress of Bills, or the contents of Acts, on which I am not called upon to afford instant information. In respect to select committees, the notes continually sent me from the Chairmen or members of Committees do not specify "I want such and such a volume of such a work," but their notes contain generally queries whether there be law upon such and such a subject; if there be, where it can be found; in what Acts: or regarding parliamentary papers, whether such information can be given, and whether, without troubling the Members with long papers, I can state briefly the information desired in their queries, which of course involves a great deal of indefinite labour during the whole of the day. Then, to the House at night, every Member must be aware of the sort of applications which are made to the Librarians, by the minute, I may almost say, for the debates, or the divisions which have taken place on particular occasions; for information concerning Finance Papers, Trade or Acts of Parliament relating to the subject under discussion, &c.: this necessarily involves

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involves (and it cannot possibly be stopped) a great deal of conversation, which must take place between the Members and the Librarians. The communications with select committees involve the attendance of messengers or committee clerks, and therefore, it is impossible to keep the Parliamentary Library quiet, their applications necessarily creating noise; add also, that by the recommendation of different select committees, Members have been requested to apply to the Library on moving for papers or accounts, in order to avoid the multiplication of printing by asking for information already before the House; and that, since the report of the Committee on Public Documents, all papers not ordered to be printed are deposited in the Library for the use of the House; and the Committee will see the reason why I distinguish between the parliamentary duties of the librarian and those which would more particularly attach to a literary library.

4. Have you found much inquiry made by Members for reports and works on the law in the late or existing Library?—I have found them very much from the Members of the House who happen to be lawyers, and sometimes from the Attorney and Solicitor-general, and from the late Lord Advocate, who made out a list of Scotch books, which was submitted to a committee, and purchased up to a certain extent; but he thought the Library ought not to contain more Scotch law than for the general purpose of reference; the general feeling has been to confine it more to any law books that apply either to parliamentary business or to constitutional law, or to law on general principles; there have been applications for works containing reported cases, but I should say that the general feeling of even the legal gentlemen, who are Members of the House, is, that the Library ought not to go to that extent as to law books.

5. You collect that from conversation with themselves?—Yes; it was Sir Edward Sugden's opinion, it was Sir James Scarlett's opinion, and it was the late Lord Advocate's opinion.

6. Digests, probably?—Yes; Sir Edward Sugden thought that anything which enables Members to trace the law should be there, but not the reported cases.

7. Are books ever taken out of the Library, except into the body of the House itself?—By select committees: on some occasions they have been taken by Members away from the Library, which gives rise, by the bye, to a very great inconvenience, namely, that the book which any Member wishes to take from the Library for his personal convenience may be the very book which for the same object of reference 50 other Members are very anxious to have.

8. The Committee, of course, do not wish you to mention any names, but can you state practically any instance of any such inconvenience as having recently occurred?—Yes; this session a book of considerable importance to the business of the House was away from the Library for some days, during which time I should think there were 70 or 80 Members applying to me for it, and begging me to send for it in every direction.

9. Was it returned to you?—It was.

10. Were you aware at the time who had it?—Yes; I was aware to this extent, that a negation had been given to the permission to the Member to take it from the Library, and after it was gone, I presumed that that Member had taken it.

11. What was the book?—It was a volume of debates applying to a particular period.

12. Is there any regulation which occurs to you as desirable to be enforced, in any new organization of the Library in the projected building?—A strict enforcement, I should say, of the non-admission of strangers, for the convenience of the House itself, and more particularly in the new Library: if it is the idea of the Committee to recommend what I have mentioned, I should consider that the Writing-room will be so applicable to the Members seeing strangers, that it would be more convenient to the whole House that strangers should not enter the main Library; and this supposed Writing-room appeared to me to afford another useful result; for though applied to the use of writing (a convenience which the House has never enjoyed), it would also afford space for an increase of books, as it would not inconvenience the Members if shelves should be put up for books at a future time.

13. Have you heard Members complain of the admission of strangers?—Frequently; I have heard of conversations having taken place when they supposed only

only Members and authorized officers were present, and when they found the contrary they wished the conversation had not passed.

14. Do you find that the regulation for the exclusion of strangers has worked beneficially, and to the satisfaction of the general body of the Members of the House?—Most decidedly.

15. Do Members make more use of the Library now than formerly?—Much more, as will be easily understood to be a necessary consequence. Up to the year 1830 the new Library had only just come into practical operation; we first used it in 1828; the House was not then attended in the way it is now, and the habit of the Members was to write their letters either before they came down, or in the Smoking-room: but the daily attendance on the House has so altered, and the number of select committees has so much increased, and the interference of individual Members in the business of the House has been so much extended, that the numbers who attended the Library (the late and the present) has trebled within the last three years, and of course the quantity of reference for information of various descriptions has increased also.

16. With respect to the regulations which occur to you as desirable to be enforced in the organization of the new Library, do you suggest anything as to the keeping such room or rooms separate for the purpose of reading and writing, to the exclusion of any eating or drinking; have you ever experienced any difficulty in preventing the introduction of such matters?—Once there was a question of luncheon being brought into the Library, and it was very firmly yet respectfully objected to.

17. With respect to the particular arrangement of the Library, does anything occur to you as desirable to be suggested to the Committee?—I should say that the inner library being to be considered as a quiet room, which Members were to use, it would be desirable that neither of the librarians should sit there; their not sitting there would prevent any conversation, and would leave them to conduct the parliamentary business; but I thought if a room were of sufficient width, and the bookcases were built out into the centre of the room as in college libraries, it might make so many distinct apartments, where two Members if they wish to speak in a low tone of voice, might go, and it would also provide double the room for books.

18. Do you hear complaints made of the insufficient accommodation provided in the actual room for the purposes of the Library for the use of Members?—Daily and hourly; it is a matter of constant, I will not say complaint, but constant application to me to know to whom they ought to apply to have it extended, or in what way it can be done.

19. What was the size of the Library in the year 1818?—It was in a small committee room, between the Smoking-room and Bellamy's Coffee-room, of 17 feet 6 inches in length by 16 feet 9 inches in width.

20. What was the size of the Library provided under the Report of the Committee of 1825?—That was a room 55 feet long by 23 feet wide, and the height 13 feet; it was found there was not sufficient circulation of air.

21. What was the size of the room provided in consequence of the Report of 1832?—There were two committee rooms, Nos. 18 and 19, which were built over the Library, and were therefore exactly the same area as the Library itself, but the height was not so great, affording however a little more accommodation for books, by the room being divided by a cross wall, which was lined with shelves on both sides.

22. Can you furnish the Committee with an account of the progress and state of the different works prepared under the orders of the late Committees on the Library, or of the Committee on the Journals, for the use of the House?—I beg to hand in the following statement:

The Index to the Local and Personal, as well as Private Acts, was commenced, under the direction of Mr. Spiller, by me, when appointed Assistant Librarian. The first work performed was to compare the collection of Private Acts (purchased of Mr. Dorington for the Library) with the Titles of Acts from the Contents to the Statutes at Large, and insert in manuscript on blank sheets the Titles of all Acts not found in the collection: thus interleaved, the Books were paged, and Acts chaptered, in MS., and the volumes rebound. The titles of all were then copied, and the whole alphabetically arranged. The Local and Personal Acts, commencing 1798, were then copied out in a similar manner and placed in alphabetical order. These operations occupied considerable time, and the degree of labour may be most easily understood, when it is stated, that the number of titles

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of Acts copied amount to 11,242, and that a large portion, perhaps one-third, of these required two or three distinct references.

The following Question and Answer will be found in the Report of the Select Committee on the Library, 1832:—Q. 50. "There is no General Index to the collection of Local and Personal Acts now in the Library?—A. No; there is no General Index. In 1829, Mr. Spiller wished very much there should be one; and while I was Under-Librarian he formed his plan of the way in which he wished it to be made, and I commenced working on that system, and have brought it down in MS. to 1827; but it yet wants arrangement and examination." In answer to inquiries by the Standing Committee, 1834, on the state of this Index, I stated that "it was probable by the end of next Session it might be ready for the press."

The General Index to the Public Acts, compiled by Mr. Spiller, was kept up to the end of the last session of Parliament in MS.; one copy for the Library, a second for the Table of the House: both were lost in the fire.

There were deposited in the Library, Indexes to several Reports, which had been laid on the Table of the House at the close of last Session, and which shared the fate of all Papers in the Upper Library.

The General Index to the Journals, incorporated annually by the Librarians, from 1820 to 1833, was fortunately saved, with only such losses as labour can easily restore. Nothing was destroyed belonging to a date further back than 1831; and that which was burnt was Lists of Petitions, room for which not being left in the volumes of the Index, were placed in a portfolio in loose sheets of paper. It is for the consideration of the Committee, whether this work should now be published. It may not be wrong to add, that the matter collected in the last 14 years would form a volume greater in bulk than the last current volume for 20 years. The Annual Indexes have, since 1820, doubled in length, a circumstance which has contributed to produce this result, and, it may be remarked, to increase considerably the labour of annual incorporation.

Sir *Robert Smirke*, called in; and Examined.

Sir *Robert Smirke*.

23. IN the event of this Committee suggesting to the House the expediency of enlarging the existing accommodation in the Library which you have provided for the use of Members, are there any means immediately available for such enlargement, so far as you can now see, in the adjoining space?—The enlargement could be immediately made by removing the small rooms adjoining.

24. How many small rooms adjoining do you propose by that answer to remove?—All that may be given up.

25. How many are there in all immediately adjoining?—Three.

26. You mean that there are three rooms, the whole, or two, or one of which might be turned into a Library, or thrown into the actual Library?—Yes.

27. The width of each, with the passage included, being of course equal to the width of the actual Library?—Yes.

28. Could you provide a second entrance from such Library into the House?—There was an entrance which I closed up at the desire of the late Speaker. It might be difficult now to restore that; but there is very little doubt that one could be made.

29. Could you provide, within the precincts of the building, any adequate accommodation for the officers who would by such enlargement be displaced, taking into your consideration the area of St. Stephen's?—It would be very difficult to do it.

30. Will you be pleased to consider that question, and to state the result of such consideration to this Committee on Thursday next at half-past eleven?—I will do so.

Jovis, 26° die Martii, 1835.

MR. SPEAKER, IN THE CHAIR.

Sir *Robert Smirke*, called in; and Examined.

Sir *Robert Smirke*.

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31. HAVE you considered what arrangement you could make for the convenience of the officers of the House?—I have.

32. What should you propose?—I would propose as the best and most convenient arrangement, to build the three rooms which are required in connexion with the small staircase which passes up from the ground-floor to the first-floor of the Long Gallery, making the three rooms parallel with St. Stephen's Chapel.

33. That would be at the left hand of the House as you enter?—Yes.

[*The Witness produced a Plan, which was read by the Committee.*]

34. What would be the expense?—It would be rather an expensive work; they should be raised above 14 feet above the ground, to keep them on a level with the Lobby; and it is quite necessary to build a high wall against the Chapel. I do not like to take down the walls of the Chapel, because it is supposed that they are capable of restoration, which is quite impossible; a high wall must be built to prevent the stones falling upon the roof of any temporary rooms built there.

35. What do you suppose would be the expense of those rooms?—£. 600.

36. If those rooms were built below the level of the floor of St. Stephen's Chapel, would they obstruct the light of any rooms below?—No.

37. Then, by a staircase they might be made to communicate?—Yes; I should place them further from St. Stephen's in that case. I was desired to select and propose a situation equally convenient with the present, and on that account I proposed raising them to the level of the floor.

38. Would not they be damp on the ground?—Certainly they would. I had thought of proposing them on the side next Palace-yard; but I found great difficulty in disposing of the chimnies from them.

39. Can you suggest any other mode by which the convenience required might be found for the Members, and for the officers of the House, without building the new rooms you have suggested?—I have been consulted by a Committee of the House on the practicability of building a large room at the south end of the present House of Commons, for the purpose of a Lobby, for some arrangement connected with the Divisions of the House. If that room were built, probably it might be applied to the purpose of the Members writing, or connected with the Library, and as a place of deposit for books as they were purchased.

40. Is that room, so proposed to be built, on the same floor with the House, or on the same floor with the Library; and if not on the same floor with the Library, what communication, if any, could be made conveniently from the one to the other?—It is proposed that this room should be on a level with the floor of the House: and it is intended, I believe, to erect a staircase at the south end of the two galleries, by which a communication could be made with the Library.

41. What additional expense would this adaptation—in communication between the proposed Lobby and the Library—occasion?—None; except the cases which might be required for the deposit of books.

42. Supposing the Lobby to be built, what saving would result to the public from applying that as you have suggested?—The sum I have estimated as the expense of the new rooms, 600 *l.*

APPENDIX.

— Appendix (A.)

BOOKS DESTROYED BY THE FIRE.

Abercrombie, Martial Achievements (Scotland)
Adelung's German Dictionary
Ælnothus, de Vitâ Canuti
Alford, Annales Ecclesiastici
Allen's Reply to Lingard
Anderson, Collect. History Mary Queen of Scots
——— Royal Genealogies
——— Historical Sketches of the Native Irish
Andrews' Continuation of Henry's History of England
Anglia Sacra, by Wharton
Anselme, Histoire Genealogique de la Maison Royale de la France
Anstis's History of the Order of the Garter
Antigua, Laws, 1690-1827
Arnold, Chronicle
Arnot's History of Edinburgh
Art de verifier les Dates
Ashburnham's Narrative of Charles I.
Astle, Origin of Writing
Ayloffe, Calendar
Babbage, Table of Logarithms
Bacon (Lord) Works
——— (Nat.) Historical and Political Discourse on the Laws of England
Bahama, Laws, 1729–1830
Baker, Chronicle
Bale, Scriptores Illust. Hist. Brit.
—— Sir Johan Oldecastell
Bannatyne, Illustration of Scotch History
Barbadoes, Laws, 1643–1762
Baringii Clavis Diplomatica
Barnes History of Edward III.
Barre (Le Père) Hist. Gen. d'Allemagne
Barrow's Travels
Bartholini Antiquitates Danicæ
Basnage, le Grand Coustumier de Normandie
Bates' Elenchus
Baxter, Glossarium
——— Life, by Sylvester
——— and Times, by Calamy
Bedæ Historia Ecclesiastica
Bentham, Panopticon
Bergier, Hist. des Grands Chemins de l'Empire Romain.
Berkeley (Bp.) Works
Bernard, Siege of Drogheda
Bernier, Empire du Mogol
Berrington, Reign of Henry II.
Berwick, Life of Duke of
Bible and Testament
Biographie Universelle
Biondi, Civil Wars of England
Birch, Memoirs of Queen Elizabeth
Blackstone's Commentaries [1809]
——— Magna Charta
Blair's Chronology
Blount's Ancient Tenures
Boece, Hist. Chron. Scot. by Bellenden
Bouquet, Recueil des Histoires de France
Boulter's Letters
Bracton, De Legibus Angliæ
Brady, History of England
Brandt, History of the Reformation in the Low Countries
Brougham, Colonial Policy
Bruce's Plan of British India
Brunet, Manuel du Libraire
Brunswick (New) Laws
Buchanan's Travels through Mysore
Burchett's Transactions at Sea
Burghley (Lord) State Papers
Burke's Works
Burnet's History of the Reformation
——— Own Time
——— Lives of Hale, Rochester, &c.
——— Lives of Dukes of Hamilton
Burney's South Sea Voyages
Burton's Diary
Bynkershoek, Opera
Cabala, sive Scrinia Sacra
Canada, Laws, 1774–1827
Cæsar, by Clarke
——— Oudendorpii
Calamy's Own Times
Camden, Anglica, Normanica, Hibernica
——— Britannia
Canciani, Barbarorum Leges Antiqua
Carleton (Sir Dudley) Letters
Carstare's State Papers
Carte, Catalogue des Rolles Gascons
——— History of England
——— Life of the Duke of Ormonde
Castlemaine's Embassy, by Wright
Cathedral and Collegiate Schools, Account of
Cavendish's Life of Wolsey
Cay's Abridgment of the Statutes
Cecil's Correspondence
Ceylon, Laws, 1799–1830
——— Upham's Sacred and Historical Records
Chalmers' Mary Queen of Scots
——— Caledonia
——— Estimate, four editions
Chamberlayne's State of England
Charles I., Works of
Charles II., Account of his Preservation after the Battle of Worcester
Chevalier, History of William III.
Christopher's (St.) Laws, 1711–1791
Chronicon Saxonicum
Chronographi Quatuor Germanicarum Rerum
Churchill's Divi Britannici
Clanrickard's Memoirs
Clarendon's Works
Clarke, Life of James II.
——— on Coins
Clerc, Le, Histoire de Russie
Codex Theodosianus
Colquhoun, Resources of the British Empire
Collectanea de Rebus Hibernicis
Collection des Memoires Français pour servir a l'Histoire de France
Collins, Historical Recollections of Noble Families
——— Baronies by Writ
——— New South Wales
Comines, De, Memoires
Condé, Prince de, Memoires
Cook's History of the Church of Scotland
—— History of the Reformation
Cooperi Dictionarium
Cooper's Parliamentary Proceedings
——— Letters on the Court of Chancery
Corpus Juris Civilis
Cotton, (Sir R.) Records of the Tower
Councils of the Church
Coustumier de Normandie (Regnault)
Cox, History of Ireland
Coxe's Memoirs of Kings of Spain, of the House of Bourbon
—— Memoirs of Sir Robert Walpole

Coxe's Life of the Duke of Marlborough
——— Memoirs of Lord Walpole
——————— Duke of Shrewsbury
Crawfurd, Great Officers of Scotland
Cromwell, State Papers
Cumberland's Law of Nature
Dalrymple (Lord Hailes), Annals of Scotland
Dalrymple (Sir J.), Memoirs of Great Britain and Ireland
Daniel, History of England
Daru, Histoire de Venise
——— Histoire de Bretagne
D'Avenant (C.), Works
Davila, Civil Wars of France
Davis, True Cause why Ireland was never subdued
——— Civil Wars of Great Britain and Ireland
De Foe, History of the Union of England and Scotland
De Goguet, Origine des Loix
De Guignes, Histoire des Hans
D'Herbelot, Bibliotheque Orientale
De la Clede, Histoire de Portugal
Dictionary of the French Academy
——————— Spanish Academy
Dodd, Church History of the Catholics
D'Ohsson, Tableau de l'Empire Ottoman
Dover (Lord) Life of Frederick II.; *see* also Ellis, Agar
Duchesne, Hist. Normanorum Scriptores
Dugdale's Summons of Nobility to Parliament
——————— Baronage of England
——————— Monasticon, with Stevens' Continuation
——————— View of the Late Troubles
——————— Origines Juridiciales
Dumont, Corps Diplomatique
Dyer, Letters on the English Constitution
——— Privileges of the University of Cambridge
——— Academic Unity
Eadmerus
Echard, History of England
Ecton, Liber Valorum
Edmonson's Peerage and Heraldry
Edwards, British West Indies
——————— Gangræna
Ellis, Agar, History of the Iron Mask
——— Correspondence
——— Historical Inquiry concerning Clarendon
Ellys, on Spiritual and Temporal Liberty
Elphinstone's Caubul
Enderbie, Cambria Triumphans
Eugene, Prince, and Marlborough, Military History
Fenn, Original Letters
Ferishta's History of the Dekhan
Fiddes Life of Wolsey
Flassan, De, Histoire de la Diplomatic Française
Fleta
Folkes on Coins
Forbes, State Papers of Queen Elizabeth
Foster, Journal from Bengal to India
Fox, Acts and Monuments
Fox (Charles James,) James II.
Francorum Historia
Frankland, Annals of King James and King Charles
Frederician Code
Froissart, Chronicles (Lord Berners)
——————— Chroniques de
Fuller, Church History
——————— History of Worthies
Gale et Fell, Historia Anglicanæ Scriptores
Garderobæ Edwardi Primi
Geddes' Tracts
Gesta Dei per Francos
Giannone, History of Naples, by Ogilvie
Gibson, Codex Juris Ecclesiastici
Godwinus de presulibus Angliæ
Gough, British Topography
Grand Coustumier, Le
Grenada, Laws, 1763–1814
Grotius de Rebus Belgicis
Guer, Les Mœurs des Turcs
Guicciardini, History of the Wars in Italy (by Goddard)
Guillim, Heraldry
Gurney, Saxon Chronicle
Gustavus Adolphus, Life by Harte
Gutch, Curious Discourses
Guthrie and Ralph, History of England
Hacket, Life of Williams
Haliburton, Account of Nova Scotia
Hallam, Middle Ages
——— Constitutional History of England
Hamilton, Federalist
Hardouin, Histoire de Constantinople
Hardwicke (Lord) State Papers
Harleian Miscellany
Harrington, Oceana
Harris, Essay on Money and Coins
——— W., Lives of James I. Charles I. & II. and Oliver Cromwell
——————— History of William III.
Hastings, Warren, Minutes of Evidence taken at his Trial
Heath, Chronicle
Heiss, Histoire de l'Empire
Henault, Abrégé Chronologique de l'Histoire de France
Henry, History of England
Herbert, Memoirs of Two last Years of Charles I.
Heylin, Life of Laud
Heywood on Fox's James II.
Hispaniæ Illustratæ
History of the Campaigns of 1796–8
Holinshed, Chronicles
Home, History of the Rebellion
Houard, Traité sur les Coutumes Anglo-Normands
Howard, Prisons and Lazarettos
——————— Memoirs, by Brown
Hughes, edition of De Lolme on the Constitution
Hutchinson, (Col.) Memoirs of
Hutchinson, History of Massachusetts.
Iconographie Grecque } A present from the
——————— Romaine } French Government
Imhoff, Regumq; pariumq; Magnæ Britanniæ
Innes, Critical Essay
Ireland, Lords and Commons Journal
——— Statutes
Jamaica, Laws: 32 Car. II., 8 Geo. IV.
James I., Works of
Jebb, Historia Mariæ Stuartæ
Jefferson, Notes on Virginia
Jeffrey of Monmouth, Brit. Hist.
Jickling, Digest of the Custom Laws
Joannis, (G. C.) Rerum Moguntiacarum Scriptores
Johnstone, James, Antiquitates Celto-Scandicæ et Celto-Normanicæ
Johnstone (Chev.) History of the Rebellion, 1745
Joinville, De, Memoires de St. Louis
Journals of The House of Commons, 1766–1833
Junii, Etymologicon Linguæ Anglicanæ
Junius, Letters
Keating, History of Ireland
Kelham, Norman Dictionary
Kelly, Cambist
Kennet, History of England
——— Register and Chronicle
Kirkpatrick's Nepaul
Knox, Ceylon
Koch, Tableau des Revolutions.
La Croze, Historié du Christianisme des Indes
Lediard, Naval History
Leibnitz, Scriptorum Rerum Brunsvicensium
Leland, History of Ireland.
Le Long, Bibliotheque de la France
Leunclavii, Historia Turcorum
Lewis, History of the New Forest
——— Life of Wickliffe
——— Life of Pecock
Lindenbrogus, Codex Legūm Antiquarum

Lindesay of Pitscottie, History of Scotland
Lingard, History of England
Liverpool (Lord) on Coins
Local and Personal Acts, 1797–1833—[Two entire Collections and 15 volumes of a third]
Locke (John) Works
Lockhart (Geo.) Papers
Lodge, Illustrations of British History
Londsdale, James II.
Lords, Parliamentary Papers. [A complete collection unbound]
Ludlow's Memoirs
Lynwood, Provinciale
Lysons, Environs of London
Lyttleton (Lord) History of Henry II.
Mabillon, De Re Diplomaticâ
Macgeoghegan (L'Abbé) Historie d'Irlande
Machiavelli, (N.) by Farneworth
Mackenzie (Sir George) Lives of Scottish Poets
——————— Affairs of Scotland
——————— Works
Macky's Memoirs
Macpherson (D) History of Commerce
——————- (James) History of Great Britain
——————— Original Papers
M'Culloch, Commercial Dictionary, 2d edition
Madox, Baronia Anglica
——— Exchequer
——— Formulare Anglicanam
Magna Charta, History and Defence of
Mahon (Lord) Life of Belisarius
——————— War of Spanish Succession
Maitland (W.) History of London
Maittaire, Corpus Poetarum Latinorum
Malcolm (Sir J.) Political History of India
——————— Central India
——————— Persia
Malta, Laws, 1813–1829
Malthus on Population
Manstein (Baron de) Memoirs of Russia
Marchmont Papers, by Sir George Rose
Mariana, History of Spain
Marlborough, Opinions of the Duchess of
Marsden, Sumatra
Martin (Montg.) Anglo-Eastern Empire
——————— Taxation of the British Empire
Marvell, (Andrew) Works
Maseres, (Baron) Historiæ Anglicanæ Monumenta
Matthæi Parisiensis, Historia Anglicana
——— Westmonasteriensis Flores Historiæ
Mauritius, Laws, 1820–1830
May, History of the Long Parliament
Meerman, Thesaurus Juris Civilis et Canonici
Melvil (Sir J.), Memoirs
Messenii, Scondia Illustrata
Meteren, de, Histoire des Pays Bas
Meursii, Historiæ Danicæ
Mezeray, Histoire de France
Milton (John), Original Letters
——————— Prose Works, by Symmons
Minsheu, Dictionary of Eleven Languages
Mongitore, Parliamenti di Sicilia
Moniteur Universel (a present from the French Government)
10 odd volumes of the collection originally in the Library
Montfaucon, Monumens de la Monarchie Française
——————— Antiquité Expliquée
Montserrat, Laws, 1668–1740
Montsrelet, d'Enguerran, Chroniques de
More (Sir T.), Utopia
Moreau (Cæsar), Statistics
Morice, Memoires de Bretagne
Moryson, Itinerary
Moulin, Du, Histoire de Normandie
Mountmorris (Lord), History of the Irish Parliament
Mudge's Trijonometrical Survey
Müller (J.), Histoire des Suisses
Muratori, Annali d'Italia
——————— Scriptores Rerum Italicarum
Nalson, Collection of State Affairs
Naunton, Fragmenta Regalia
Nevis, Laws, 1664–1739
Newcourt, Repertorium
Nicholl, Recollection of Public Affairs
Nicolas, Battle of Agincourt
Nicolson (Bt.), English, Scotch and Irish Historical Libraries
Nisbet, Heraldry
Nordberg, Histoire de Charles XII.
North's Life of North
Northumberland Household Book
Nova Scotia, Laws, 1758–1804
Nugent (Lord), Life of Hampden
Œfelii, Rerum Boiacarum Scriptores
Ogygia, Rerum Hibernicarum Chronologia
O'Halloran, History of Ireland
Olaus Magnus, de Gentibus Septentrionalibus
Oldmixon, History of England
Orford (Lord), Memoires
Orleans (Pere d'), Revolution d'Espagne
Orme, History of Hindostan
——— Historical Fragment of the Mogul Empire
Orrery (Earl of), State Papers
Oxley, New South Wales, with Plates
Pinkerton, History of Scotland
Pitseus, de Rebus Anglicis
Planches, Diverses, (a present from the French Government)
Planta, Helvetic Confederacy
Pococke, Description of the East
Polydorus Vergilius de Rebus Anglicis
Portugueze Chronicles; viz.
Chronicas ineditas da Correa de Serra
——————— del Dom Joãõ
——————— dos Reis de Portugal
——————— da Tellez
Palgrave (Sir F.), English Commonwealth
Parker (Mat.), Antiquitates
——————- (Bishop) Own Times
Parliamentary Papers, 1801–1833 (two entire collections, and 12 odd volumes of a third)
Parr, Life of Archbishop Usher
Peck, Desiderata Curiosa
Pegge, Curialia
Percival, Ceylon and Cape of Good Hope
Petty (Sir W.), Political Survey of Ireland
Postlethwaite on Commerce
Pottinger, Beloochistan
Powell (Dr.), History of Wales
Private Acts, 1757–1829
Proces Verbaux des Chambres de Paris et des Deputés (a present from the French Government)
Prussienne, Atlas de la Monarchie
Prynne, Records
Ptolomæi, Geographica
Public General Acts, 1694–1833
Puffendorf, by Barbeyrac
Pütter, History of the German Empire
Raffles, Java
Raleigh (Sir W.) History of the World
Ralph, History of England
Rapin and Tindal, History of England
Rastell, Chronicles
Recueil des Ordonnances des Rois des France
Rennell, Hindostan
Rerum Anglicarum Scriptores post Bedam
Ricardo, Political Economy
Ridpath, Border History
Road Acts, 1754–1796
Roquefort, Glossaire de la Langue Romane.
Rose on Fox's James II.
Royal Household, Ordinances
Ruding (G.) Annals of Coinage
Rulhiere, Histoire de Pologne

Rushworth, Collections
Russell, Aleppo
Rycaut, History of the Turks
Ryley, Pleadings in Parliament
Rymeri Fœdera
Sadler, State Papers
——— M. T. on Population
——— ——— on Ireland
Sandford, Genealogical History of Englaud
Scandia Illustrata
Scott (David), History of Scotland
Secret History of James I.
Simon (Thomas) on Irish Coins
Sismondi, Histoire de France
——— Histoire des Republiques Italiennes du Moyen Age
Skene, Regiam Majestatem
Slingsby, Memoirs
Smith (Adam) Wealth of Nations
Smyth, Lives of the Berkeleys
Snelling on Coins
Snorroni's Historia Septentrionalium
Soane, Civil Architecture
Somers (Lord), Collection of Tracts
Somerville, History of Queen Anne
Southey, Peninsular War
Spanish Chronicles, by the Academy of Madrid
——— Laws, viz.
Las Sieté Partidas
Spark's American Diplomatic Correspondence, 2 copies
Speed, History of Great Britain
Spelman, English Works
——— Glossarium
——— de Vitâ Alfrædi
Spotswood, Church of Scotland
Stafford (Lord), Improvements
Stafford (Sir J.) Pacata Hibernia
Stanihurst, de Rebus Hibernicis
State Papers, Henry VIII.
State Tracts
Statutes at Large, 2 copies
Staunton's China
Steuart (Sir James) Works
Stewart, History of Scotland
Story, Impartial History of the Wars in Scotland
Stow, Annals
Strafford (Earl), Letters and Dispatches
Stritteri, Excerpta Script. Hist. Byzantinæ
Strutt, Chronicles
——— English Sports and Pastimes
Struvii, Corpus Historiæ Germanicæ
Stuart, Genealogical History of the Stuarts
Sully, Memoires de
Sydney Family, Collection of Papers
——— Papers, by Blencowe
———, Algernon, on Government
———, Sir Philip, Works
——— ——— Miscellaneous Works
Symes's, Ava
Tacitus, de Moribus Germanorum
Tanneri Bibliotheca Britannica
——— Notitia Monastica
Temple (Sir J.), History of the Irish Rebellion
Temple (Sir W.), Letters
——— ——— Works
Theatrum Tragicum
Thuani Historia
Thuringia Sacra
Thurloe (John), State Papers
Tod (Col.), Annals of Rajastan
Tolneri, Historia Palatina
Tooke, Life of Catherine II. of Russia
Torfœi, Thormodi, Series Dynastarum
——— Historica rerum Norwegicarum
——— Trifolium
Townsend, Historical Recollections
Trade in France, Memorials
Traité Diplomatique
Trench (Col.), Thames Quay
Trithemii Annales Hirsangienses
Tucker's Works
Turenne, Memoirs de
Turner's Thibet
Twysden, Scriptores Decem
Tyrrell, History of England
Tyrrhwitt and Tindall, Statutes
United States, 12 volumes of Journals of Congress and State Papers
Universal History
Usserii, Veterum Epistolarum Hibernicarum Sylloge
Velly, Histoire de France
Vere (Sir F.), Commentaries
Verstegan, Decayed Intelligence
Verlot, Histoire des Chevaliers de Malte
——— ——— des Revolutions des Suedes
Vicar, Parliamentary Chronicle
Vicat, Vocabularium Utriusque Juris
Ville (Hardouin), Histoire de Constantinople
Vincent (St.), Laws
Vocabolario della Crusca
Votes of the House of Commons; several odd volumes
Waldegrave (Lord), Memoirs
Walker, Historical Discourses
——— Sufferings of the Clergy
Wallace on Population
Walpole (Horace), Historic Doubts
Walsingham, History
Waltheri, Lexicon Diplomaticum
Ware (Sir J.), Works concerning Ireland
Warrington, History of Wales
Warwick (Sir P.), Memoirs of Charles I.
Watson (R.), Philip II. & III.
Wells' Bedford Level, with two Maps
Whitaker, Vindication of Mary Queen of Scots
Whitelock's Embassy to Sweden
Whitelocke (Sir B.), Memoirs of English Affairs
——— ——— on Government
Wicklif, New Testament
Wicquefort, De, Ambassador
Wilks, South of India
Wilkins (Bishop), Concilia Magnæ Britanniæ
——— D., Leges Anglo-Saxonicæ
Willis (Browne), Cathedrals
Winwood (Sir R.), Memoirs of Affairs of State
Witichindi, Annales
Wood, Athenæ Oxonienses
Woodrow (R.), Church of Scotland
Wottoni, Leges Wallicæ
Wynne (W.), Memoir of Sir Leoline Jenkins
Zurita, Annales d'Arragon.

— Appendix (B.) —

BOOKS SAVED FROM THE FIRE.

Acherley on Parliaments
Acts of Parliament of Scotland, 12mo and fol.
Adolphus' History of England
Ainsworth's Latin Dictionary
Alfred, Saxon Version of Orosius
Alison's Principles of Criminal Law
——— Practice of ditto
Anderson, Diplomata Scotiæ
Arnot's Criminal Trials
Astle, Origin of Writing
Atkins, Political Tracts
Auber's Analysis of the Constitution of the East India Company
——— Charters and Statutes of East India Company
Aulaire, St., Histoire de la Fronde
Bacon's Letters
Balfour's Practicks
Banister's Humane Policy
Bannatyne Club Books; viz.,
Criminal Trials
Descrittione del Regno di Scotia di Petruccio Ubaldini
Marriage of James VI.
Memorials of G. Bannatyne
Regalia of Scotland
Barrington on the Statutes
Bayle's Dictionary
Beatson, Chronological Register
——— Political Index
Bell's Commentaries
—— Law of Elections
——— Scotland
Bingham's Antiquities
Blackstone's Commentaries
Blount's Law Dictionary
Bohun's Debates
Bolingbroke's Works
Brady on Boroughs
Bramwell on Bills
——— Table of Private Acts
Bromley's Letters
Bulletins des Loix, complete; presented by French Chamber of Deputies
Burke's Speeches
Burlamaqui, National Law
Burnet's Criminal Law
Burn's Ecclesiastical Law
——— Justice
Butt's County Contests
Camden's Remains
Canning's Speeches
Carew's Rights of Elections
Carey's Atlas
Carlisle's Topographical Dictionary
Carpenter on Elections
Chalmers, Biographical Dictionary
——— Estimate
——— Treaties
Chambaud, Dict. Française
Chamberlayne's State of Great Britain
Chatham, Life of Earl of
Cinque Ports, Laws
Civil and Criminal Justice of India
Clarendon's Rebellion and Life
Clede's Hist. du Portugal
Clifford's Southwark Election Case
Code Napoleon
Coke's Detections
——— Institutes
Colebrooke's Hindu Law
Collection of Letters, 1760–1766
Colquhoun on the Police
Conférence du Code Civil
Connell on Elections
——— Parishes
——— Tithes
Copley, Horsham Election Case
Corbett and Daniell, Election Cases
———'s Inquiry
Cottonian MSS. Catalogue
Cottoni Posthuma
Cowel's Law Dictionary
Cragii Jus Fendale
Curran's Speeches
D'Anville, Empire de la Russie
——— Empire Turc
Davies, Cambro Britannic Dictionary
Debates, Parliamentary
——— ——— (Ireland)
Debrett's Peerage and Baronetage
De Lolme on the Constitution
Demise of the Crown, Account of
D'Ewes, Journal of Queen Elizabeth
Disney on Elections
Dodd on Elections
Dodington's Diary
Domat's Civil Law
Doomsday Book
Douglas on Elections
Du Cange, Glossarium
Dunlop's Parochial
Dwarris on the Statutes
Eden's State of the Poor
Edinburgh Gazetteer
Edmondes and Carew, Negociations
Elsynge on Parliaments
Encyclopædia Britannica
Epistolæ Jacobi et Mariæ Scotiæ
Erskine's Speeches
Eton Atlas and Index
Facciolati Lexicon
Federalist
Fiddes, Life of Wolsey
Firma Burghi
Fleetwood, Chronicum Pretiosum
Focaloir, Irish Dictionary
Fortescue, de Laudidus Legum Angliæ
Fox's Speeches
France, Papers relating to Negociations with, 1793–1797
Fraser's Election Cases
Frederic II., Clavus
Frewin's Custom Laws
Friends, Rules of Society of
Gabbett s Digest of the Statute Law
Gaelic Dictionary
Glanville's Reports on Elections
Gordon, Antiquities of Parliament
Gough, Alien Priories
Granger's England
Grotius de Jure Belli ac Pacis
Gudenus Sylloge variorum Diplomaticorum
Gwillim on Tithes
Hailes, Annals of Scotland
Hakewel on Parliaments
Hale on Parliaments
Hakaus Glossarium Germanicum
Hamilton's East India Gazetteer
Harleian MSS. Catalogue
Hastings' Trial
Hatsell's Precedents
Henry Prince of Wales, Life of
Hertslett's Treaties

Hearne's Works; viz.,
Adami de Domerham, Alfred the Great, Aluredi, Annals of Elizabeth, Avesbury, Benedictus Abbas Petroburgensis, Curious Discourses, Dodwell, Edward II., Foro Juliensis, Glastonbury, Gulielmi Neubrigensis, Hemingi Cartal, Johannis de Fordun, Liber Niger Scaccarii, Rich. II., Sprotti Chronica, Robert of Gloucester, Textus Roffensis, Vindication of Oath of Allegiance
Hederici Lexicon
Heywood's County Elections
Hickes, Antiquæ Literaturæ Septentrionalis
Hoffmanni, Lexicon Universale
Holles, Memoirs
Howell's State Trials
Hume on Crimes
———'s Custom Laws
———'s England
Husband's Ordinances
Hutcheson's Justice of the Peace
Jhre's Dict. Suevo-Gothicum
Jamieson, Scottish Dictionary
Jenkinson's Treaties
Johnson's Ecclesiastical Laws and Canons
———— Laws of Isle of Man
Johnstone's Laws of Spain
Jones, Secret History of Whitehall
Juridical Styles
Jus Parliamentarium
Kames, Elucidations
——— Equity
——— Law Tracts
Kay's Abridgment of Statutes
Keeble's Statutes
Kelham's Doomsday Book
Kelly's Cambist
Kennet on Impropriations
Ker's Memoirs
Kock, Traités
Laing's History of Scotland
Lambard's Eirenarcha
Langtoft
Lansdowne, MSS. Catalogue
Laveaux, Dictionnaire Française
Laws of Elections
Leland's Collectanea
Lempriere, Classical Dictionary
———- Universal Biography
Leslæus de Moribus Scotorum
Llhuyd, Archæologia Britannica
Locrè, 29 of 31 vols.
Lodge's Peerage
Luder's Election Cases
Ludlow's Continuation of May's History
Lye and Manning's Saxon Dict.
M'Culloch's Commercial Dictionary, 1st ed.
M'Cuirtin's Irish Dictionary
M'Douall's Institute
Magna Charta, History of
Male's Law of Elections
Mallet, Histoire de Danemarc
Man, Laws of the Isle of
Manwood's Forest Laws
Marlborough, Conduct of Duchess of
Martens Law of Nations
———- Recueil des Traités
Mayo's Tables, fol.
Melville's Impeachment
Menage, Dictionnaire Etymologique
Merewether, West Looe Case
Military Thanks
Mill's British India
Mirror of Parliament
Molesworth's Denmark
Mollyneux, Case of Ireland
Molleson's Accounts
Monmouth, Memoirs of Earl of
Monteil, Hist. des Français
Moreri Dict.
Muratori Antiquitates Italicæ
Napoleon, Opinions de; from French Chamber of Deputies
Neale's Hist. of the Puritans
Nicholson's Border Laws
———— Correspondence
Noble's Biographical History
——— House of Cromwell
Ockley's Hist. of the Saracens
O'Loghlin's Election Cases
Orme on Elections
Otterbourne, Chronicle
Owen's Welsh Dictionary
Parnell's Financial Reform, 2d and 4th edit.
——— on Roads
Paterson's Roads
Peckwell on Elections
Pelletier, Dictionnaire Bretonne
Perrott, History of Sir G.
Perry & Knapp's Election Cases
Petrie, Cricklade Case
Petyt, Rights of Commons
Phillipps, Election Cases
Pinkerton, Hist. of Scotland
Pitisci Lexicon Antiquitatum
Poland, Letters on
Poor Returns, 1777
Porter's Tables of Statistics
Potter's Germanic Empire
Price on Annuities
Privy Council's Authority (Palgrave)
———— Proceedings, 8vo.
Prynne's Brevia Parliamentaria
———- 4th Part of Parliamentary Register
———- Plea for the Lords
———- Power of Parliaments
Raithby's Index to the Statutes, 8vo. and 4to.
Rajah of Travancore, Report
Ralph, Use and Abuse of Parliaments
Rastall's Statutes
Record Commissioners' proceedings
———————— publications
Reeve's Election Cases (Ireland)
Regiam Majestatem
Reresby's Memoirs
Robertson's Scotland
Robinson's Admiralty Reports
Roe's Elections
Rogers, Law of Elections
Romilly's Speeches
Royal Institution, Catalogue
Russell on the Reform Act
——— Crimes
Scapulæ Lexicon
Schilteri Antiquitates
Scobell's Acts
Scoto-Celtic Dictionary
Selden's Works
Seybert's Statistical Annal
Shepherd's Election Law
Sherwood on Private Bills
Simeon on Elections
Simmons on Courts Martial
Six Codes, Les
Smollett's England
Spanish Laws, viz. Recapitulation de las Leyas
Spence, Court of Chancery
Spencer, Campion, &c. Irish Hist.
Stair's Institutes
Stannaries, Laws of the
Starkie's Law of Evidence
Statute Law of Scotland
Statutes of the Realm, by Record Commission
Strada de Bello Belgico
Strange's Hindu Law, two editions
Struvii Bibliotheca Juris
Strype's Annals
——— Aylmer
——— Cheke

Strype's Cranmer
——— Ecclesiastical Memorials
——— Grindal
——— Parker
——— Smith
——— Whitgift Index
Swift's Four last years of Queen Anne
Tacitus
Tait's Law of Evidence
—— Justice of the Peace
Taylor's Civil Law
Tomlins, Law Dictionary
——— on Elections
Tooke's, Rev. W., History of Russia, two vols.
——————————— Russian Empire, three vols.
Tracts, fol. 1,780
Triveti, Annales
Troward on Elections
Truro, Reports of Elections there
Turner's Anglo Saxons
——— England
Tyrrwhitt and Tindale's Statutes
Tytler, Military Law
Varnes, Dom. de, Dict. Diplomatique
Vattel's Law of Nations
Vertot, Hist. de Portugal
Vicat, Vocabularium Utriusq. Juris
Walker's Hist. of Independence
Watkins' Tenures
Well's Revenue and Expenditure of the United Kingdom
Watt's Bibliotheca Britannica
Wellwood's Memoirs
Whitworth's Account of Russia
Wight's Law of Elections
William III., Original Letters
William's Inland Navigation
Willis, Hist. of Abbeys
——— Notitia
Wordsworth on Elections
Wyndham's Speeches
Wynn's Argument.

— Appendix (C.) —

LIST OF MANUSCRIPT INDEXES TO REPORTS

Deposited in the LIBRARY, and destroyed by the Fire of the House of Commons, October 1834.

Report from the Select Committee on Petitions, complaining of Agricultural Distress, &c.; 1820 (255).
Report from the Select Committee on the Petitions, complaining of the depressed state of the Agriculture of the United Kingdom; 1820 (668).
Report from the Select Committee appointed to inquire into the Corn Trade of the United Kingdom; 1812–13 (184).
Reports from the Lords' Committees on the state of the Growth, Commerce and Consumption of Grain, and all Laws relating thereto; 1814 (26).
Report from the Committee on the Adulteration of Clover and Trefoil Seeds; 1821 (595).
Report from the Select Committee of the House of Lords, appointed to inquire into the Price at which Foreign Grain may be shipped in Foreign Ports; the Quantity of such Grain; and the Price at which such grain can be imported into this Country; 1826–27 (333).
Second Report from the Select Committee on Emigration from the United Kingdom; 1826–27 (237).
Report from the Committee on the Employment of Boys in Sweeping Chimnies; 1817 (400).
Report of Minutes of Evidence taken by the Committee on the State of Children employed in the Manufactories of the United Kingdom; 1816 (397).
Report from the Committee on the State of Mendicity in the Metropolis; 1815 (473).
Report from the Select Committee on the Poor Laws; (1817) 462.
Report from the Lords' Committees on the Poor Laws; 1818 (400).
Report from the Select Committee on the Employment of the Poor in Ireland; 1823 (561).
Report from the Select Committee on that part of the Poor Laws relating to the Employment or Relief of Able-bodied Persons from the Poor Rate; 1828 (494).
Report of the Select Committee on the State of the Poor in Ireland; being a Summary of the First, Second and Third Reports of Evidence taken before that Committee; together with an Appendix of Accounts and Papers; 1830 (667).

REPORT

FROM THE

STANDING COMMITTEE

ON THE

LIBRARY OF THE HOUSE OF COMMO

TOGETHER WITH THE

MINUTES OF EVIDENCE,

AND APPENDIX.

Ordered, by The House of Commons, *to be Printed,*
30 *March* 1835.

104.

REPORT

FROM THE

SELECT COMMITTEE

ON

REBUILDING HOUSES OF PARLIAMENT;

WITH THE

MINUTES OF EVIDENCE,

AND APPENDIX.

Ordered, by The House of Commons, *to be Printed,*
3 *June* 1835.

Lunæ, 2° die Martii, 1835.

Ordered, THAT a Select Committee be appointed to consider and report upon such Plan as may be most fitting and convenient for the permanent Accommodation of the Houses of Parliament.

And a Committee was appointed of—

Mr. Chancellor of the Exchequer.
The Marquis of Chandos.
Lord John Russell.
Lord Stanley.
Sir John Hobhouse.
Sir James Graham.
Mr. Littleton.
Lord Francis Egerton.
Sir Richard Vyvyan.
Mr. O'Connell.
Mr. Hume.
Sir Harry Verney.
Mr. Ridley Colborne.
Sir Charles Burrell.
Sir Robert Inglis.
Mr. Williams Wynn.
Mr. Tracy.
Mr. Warburton.
Sir George Clerk.
Mr. Hughes Hughes.
Mr. Bannerman.
Lord Granville Somerset.
Lord Viscount Howick.

Ordered, THAT the Committee have power to send for Persons, Papers and Records.

Ordered, THAT Five be the Quorum of the Committee.

Ordered, THAT the Copy of the Report of the Lords of the Council upon the Evidence taken respecting the Destruction by Fire of the two Houses of Parliament (presented 24th February) be referred to the Committee.

THE REPORT - - - - - - - - - - - p. 3
MINUTES OF EVIDENCE - - - - - - - - - p. 7
APPENDIX - - - - - - - - - - - p. 33

REPORT.

THE SELECT COMMITTEE appointed to consider and report upon such Plan as may be most fitting and convenient for the permanent Accommodation of the HOUSES OF PARLIAMENT, and who were empowered to report their Opinion, together with the MINUTES of the EVIDENCE taken before them;——HAVE considered the Matter referred to them, and have agreed upon the following RESOLUTIONS.

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1. *Resolved*,—THAT the length of the present House is inconveniently great as compared with its breadth, and that in the House to be constructed such defect should be avoided, and that the length ought not greatly to differ from the breadth.

2. *Resolved*,—That sitting room be provided for from 420 to 460 Members in the body of the House, and adequate accommodation for the remainder in the galleries, not exceeding 1,200 feet of sitting-room in all.

3. *Resolved*,—That a Passage be provided on the outside of the House, and conveniently communicating with the lobbies and the gangways in the House.

4. *Resolved*,—That two Lobbies or Rooms be provided immediately adjoining the opposite sides or ends of the House.

5. *Resolved*,—That one of the said rooms or lobbies should contain with an adjacent room (if necessary) not less than 1,800 square feet, and that the other room or lobby should not contain less than 1,100 square feet.

6. *Resolved*,—That there should be an outer Lobby for strangers desirous of speaking to Members on their entrance to the House.

7. *Resolved*,—That there be one or more Galleries at the lower end of the House for the accommodation of 200 strangers, (of which a portion in the centre to contain 24 persons), each of which Galleries should have a separate access, and a retiring-room at no great distance for the strangers respectively to occupy when the House is cleared.

8. *Resolved*,—That means should be afforded for the convenient accommodation of the Members of the other House of Parliament and of distinguished individuals within the walls of the House of Commons, and that the accommodation for this class of strangers should be calculated for 100 persons.

9. *Resolved*,—That special provision be made for the due ventilation of all the rooms in the new House.

10. *Resolved*,—That there be 30 Committee-rooms provided.

11. *Resolved*,—That there be 10 Committee-rooms about 40 by 30, from 18 to 20 feet in height; ten, 35 by 25, from 16 to 18 in height; ten, 30 by 20, from 14 to 16 in height.

 12. *Resolved*,

12. *Resolved*,—That the largest sized Committee-rooms be so arranged with separate entrances, as to be capable of being fitted up in the manner most convenient for Election Committees.

13. *Resolved*,—That the Library be formed of three rooms, each 60 feet long, and wide and lofty in proportion; and that there be a small intervening lobby for a Messenger between the first and the two other rooms comprising the Library.

14. *Resolved*,—That there be an apartment consisting of four Rooms for the accommodation of the Librarian over the Library or contiguous thereto.

15. *Resolved*,—That with a view to the possible increase of the Library, certain of the Committee-rooms be either contiguous or in the vicinity of the Libraries, and capable of being fitted up for the reception of books.

16. *Resolved*,—That it is expedient that provision should be made for an official Residence for The Speaker of the House of Commons, within the precincts of the buildings about to be erected, due reference being made to his situation, and to the salary attached thereto.

17. *Resolved*,—That the Committee is of opinion that it is inexpedient that a dwelling-house for the Chief Clerk of the House of Commons should form, as heretofore, part of the buildings belonging to the Houses of Parliament.

18. *Resolved*,—That the Committee consider it necessary that arrangements should be made for the present Chief Clerk, by which he may be enabled to provide himself with an adequate residence, in place of that which he has hitherto occupied.

19. *Resolved*,—That the Committee are of opinion that sufficient Apartments should be provided for the Chief Clerk within the precincts of the parliamentary buildings, for the transaction of his official business.

20. *Resolved*,—That it is expedient that the Rooms to be provided for the Chief Clerk should be four in number, three for his own use, and one for the use of a servant.

21. *Resolved*,—That one Room should be provided for each of the two Clerks-Assistant.

22. *Resolved*,—That there be provided two Prison-rooms, and one small Room for the Messenger.

23. *Resolved*,—That the Deputy Housekeeper be provided with two Sitting-rooms, two Bed-rooms, two Store-rooms, and four Servants' Rooms.

24. *Resolved*,—That there be one Kitchen and one Dining-room for Members, and one other Dining-room open equally for Strangers as for Members, and also Cellars, each Dining-room to be capable of accommodating 30 persons.

25. *Resolved*,—That it is expedient that the designs for the rebuilding of the Houses of Parliament be left open to general competition.

26. *Resolved*,—That the style of the buildings be either Gothic or Elizabethan.

27. *Resolved*,—That a Lithographic Plan be made of Westminster Hall and of the Premises adjoining, showing the entire area to be occupied by the intended New Buildings, and including the space to be gained by the intended embankment of the river.

28. *Resolved*,

28. *Resolved*,—That with the Lithographic Plan there be given a specification of the general accommodation required; of the dimensions of the principal offices; of the number of persons which either House of Parliament should be calculated to hold on the floor; of the space to be allowed for each Member; and a description of the form of each House, so far as may have been determined by the respective Committees.

29. *Resolved*,—That all designs be executed on one and the same scale, viz. of 20 feet to an inch, and that no coloured drawing of any kind be received, nor any perspective ones, save such as shall be taken from situations selected, and specified on the Lithographic Plan to be delivered to the parties, and no Models be accepted.

30. *Resolved*,—That all persons wishing to send in Plans for the rebuilding of the two Houses of Parliament shall, on application to the Office of the Woods and Works Department in Whitehall Place, be furnished, on the payment of 1 *l.*, with a Copy of the Resolutions of the Rebuilding Committees of both Houses of Parliament, with a Copy of the Evidence relative to the proposed accommodation of the two Houses, and of the offices and other buildings thereunto belonging, and with a Copy of the specified Measurements, and of the Lithographic Plan, on which is pointed out the ground destined as the site for the above-mentioned buildings.

31. *Resolved*,—That the Plans shall be delivered in to the Office of the Woods and Buildings at Whitehall, on or before the first day of November next.

32. *Resolved*,—That in order more effectually to secure a correct decision upon the merits of the several Plans, it is expedient that an humble Address be presented to His Majesty, requesting him to appoint Five Commissioners to examine and report generally to both Houses of Parliament upon the Plans offered by competition; and that such Commissioners shall select and classify such of the Plans, being not less than three or more than five in number, as shall seem to them most worthy of attention; and shall state, if required, the grounds upon which the propriety of such selection and classification is founded.

33. *Resolved*,—That in order to save any unnecessary delay in procuring the Plans, or unnecessary trouble and expense to the Parties furnishing them, it shall not be required that any estimate shall accompany a design; and should an estimate be required, any party called upon to furnish it shall receive compensation should his Plan be ultimately rejected.

34. *Resolved*,—That a premium of 500 *l.* be given to each of the parties whose Plans shall be recommended by the Commissioners, and shall be considered by them as worthy of the reward; and that the successful competitor shall not be considered as having necessarily a claim to be entrusted with the execution of the work; but if not so employed he shall receive an additional reward of 1,000 *l.*

3 *June* 1835.

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MINUTES OF EVIDENCE.

Mercurii, 11° *die Martii*, 1835.

THE RIGHT HONOURABLE LORD GRANVILLE SOMERSET, IN THE CHAIR.

John Henry Ley, Esq., called in; and Examined.

John H. Ley, Esq.
11 March 1835.

1. HOW long have you been Clerk to the House of Commons?—I was appointed in 1801.

2. All the other clerks are under your superintendence, are they not?—They are.

3. Can you state to the Committee the amount of accommodation that there was for those clerks in the former buildings of the House of Commons, and whether that was adequate or not?—In the office of the Clerk of the Fees, in which the public business, the Treasury business, is prepared, which is the principal part of the duty, Mr. Dorington had a room for himself; there was also a small office, in which there were four clerks who were on the establishment, and two rooms upstairs, in which there were four writing-clerks.

4. Did he not transact private as well as public business?—Yes.

5. Do you conceive those apartments sufficient for the transaction of his public business?—Yes, except as to the size of the rooms.

6. The number of apartments was sufficient, but it would have been more convenient for the transaction of his public business that the size of the rooms should have been larger?—Yes.

7. Will you state the accommodation to the other clerks?—The Journal-office had a tolerably large office, in which Mr. Bull and seven clerks had desks; there were small rooms upstairs, in which printed papers were examined; and he had a private room of his own, in which sessional papers and books were kept, and a library

8. Had he any private business, or was his all public?—He might have one or two private bills, but he did not act much as an agent.

9. But as a general proposition, he had no private business?—He had not.

10. Were the apartments he had sufficient in point of number?—Not quite; I think if there had been two rooms more, it would have been better.

11. What additional accommodation would you suggest?—I think there ought to be one large office and four small rooms.

12. Would those rooms be calculated to hold two clerks each?—Yes; the principal object is for the examination of papers ordered to be printed, the manuscript with the proof.

13. And therefore a light room is very important?—Certainly; there ought to be two rooms for that purpose, and a room as a kind of library attached to the office, and a room for Mr. Bull. There ought also to be a room immediately connected with the House of Commons, for the purpose of compiling the daily votes and proceedings, on the same floor; very great convenience has been found from a room of this kind during the present session. There is a constant communication between the Clerks at the Table and this office; it was very inconveniently situated in the old House, and the business is now done much more satisfactorily than it was done in the common office, where there were constant interruptions. I think this office is essentially necessary.

14. Are there any store-rooms attached to the office?—Merely for the common paper and the pens.

15. Nothing of any magnitude?—No; the department of the library used formerly to be attached to the Journal-office, but that is now an office of itself: there will be wanted one store-room, in which the petitions that are presented in the course of the session must be kept.

16. But not petitions of preceding sessions?—All the papers that were presented to the House of Commons were distributed all over the building, under the care of the Clerk of the Journals; there was no particular room for them.

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17. Would it be more convenient that these papers, which used to be so distributed, should be placed in one or more apartments contiguous to the House?—I think it would, because the presses were a great incumbrance to the committee-rooms and passages; when the building was destroyed the rooms were full, there was not room to put away a single paper; there are a great many papers that are saved, which are in the Westminster Hospital.

18. Then it would be convenient to have certain store-rooms for those papers and documents?—Yes; if those papers are all to be preserved, there must be store-rooms.

19. In addition to those store-rooms, you would suggest other store-rooms; but their position is not of much importance, whether they are attached to each other or separate?—There were a great many very useless papers kept, indeed every paper was kept; it would be desirable that all documents which might be considered worthy of being preserved, should be kept together as near as possible. There are saved all the manuscript Journals, and also a complete set of the Sessional Papers, which are attached to the Journal-office: rooms should be provided for the keeping of those documents.

20. Who is the next clerk holding apartments?—The Committee-clerks.

21. That office is composed of four divisions, is it not?—It has been recommended by a Committee that there should be five divisions.

22. Consisting of a chief clerk of each division, and how many sub-clerks?—The office is divided now into four divisions, and there is one clerk and one assistant at each desk, and each desk carries on the business perfectly distinct and separate from any other.

23. Do you conceive that it is desirable that each clerk should have a room separate for himself, or is it better for the public service that they should be all in one room?—I think it would be much better for the public service that the Committee-clerks should be under one head; that there should be one general superintendent, and that the others should be clerks in that office under him.

24. Then your idea would be, that it would be better to have one large apartment for all the clerks, than to have separate divisions for each department; you would prefer for the transaction of the business one large apartment in which all the Committee-clerks should sit and transact their business, having a communication with each other, rather than having more rooms, and having them divided into those several rooms?—I do not think it makes any difference; I think it is a matter of arrangement whether they should be in one large room, or in two or three small rooms.

25. In all cases is it not an object that they should be contiguous?—Certainly; and probably it would be better that they should be all in one large room as they are now, but under the superintendence of one at the head. I do not approve of making more divisions of the office than there are now, as recommended by the Committee; perhaps the best way would be to divide the office into three divisions, and to have four clerks in each division; and then there might be three moderately sized contiguous rooms.

26. That is what you think would be the most convenient for the public service?—Yes.

27. Connected with that, do you take into consideration the circumstance of those clerks transacting private business?—I think that the Committee clerks ought not to transact private business at all.

28. Your idea would be, that they should not transact private business, and under those circumstances that they should have one large room?—Yes, unless the office is divided into three divisions; in which case, as I have before stated, I think it would be best that there should be three rooms, as the clerks would not interrupt each other.

29. How many Committee-clerks or assistants would you contemplate for the business; that is, how many desks would you have?—Five desks, with two clerks at each desk, are recommended by the Committee.

30. That you think would be quite sufficient for the duty of the Committee-clerks' office?—I think so; it would not be sufficient if there are 30 Committees, and each Committee is to have a clerk, then you must have an increase of establishment; but I think 10 clerks may attend all the Committees, especially as the Committees have short-hand writers, because one clerk may attend two or three Committees at a time; it is not necessary that he should be in the room all the time in each Committee.

31. Hitherto there have been eight?—Yes; and one at the head of the office, Mr. Rose: when he was appointed to the office of Committee-clerk, which was considered a sinecure office, I told him that he should not hold it as a sinecure, but preside over the office, and occasionally attend Committees, which he has done.

32. Therefore

32. Therefore there may be considered to be 11 available persons, four desks, and the superintendent?—Yes. There certainly ought to be a room attached to the office, in which witnesses who have given evidence might go and examine their evidence, and correct it.

33. What is the establishment of the Ingrossing-office, and what is the accommodation necessary?—The greatest part of the actual work of the Ingrossing-office is done by stationers; we could not have an establishment that would ingross all the bills; the establishment consists of three clerks at present.

34. What sort of arrangements ought they to have?—They ought to have one large office, with a large table in the middle, and four large desks.

35. And one small one?—They may have a small room attached to it.

36. Should not the Ingrossing-office be so placed as to have great power of light?—I do not know that that is of more importance to the Ingrossing-office than to any other office; there should be a good light to all the offices. In the plans which were formerly proposed the offices were very low, so that no one could have had light except close to a window; it is essentially necessary that all the offices should have good light all over the rooms.

37. Will you state, with regard to the Committee-clerks' office, what amount of apartments they had?—They had a room which was divided into four desks, and two clerks at each desk.

38. Was that sufficiently spacious?—No, it was not; certainly it was inconveniently small.

39. Was the Ingrossing-office sufficiently spacious?—No, it was too small; a good deal of room is required for the manual labour of rolling up bills and unrolling them. There ought to be room for four clerks in that office, and also room for a large table, on which bills are to be rolled up and unrolled.

40. With respect to the Clerk of Elections, what room ought he to have?—Two good rooms.

41. What amount of establishment has he?—A clerk and clerk-assistant; they do a good deal of private business.

42. In the Committee which sat in the year 1833 there is a recommendation that the officers of the House should not interfere in private Parliamentary business; is that recommendation intended to extend to these two clerks?—That was merely a suggestion of the Committee, but has not been at all adopted.

43. But it applied to the Clerks of Election?—Yes; the object was to prevent any clerk on the establishment from having private business; but the principal private business has been done by the Clerk of Election Committees, and by Mr. Dorington; they are the principal Parliamentary agents.

44. There is very little private business done by Committee-clerks, is there not?—Very little; I should not encourage that at all.

45. In saying you should require two rooms for the Clerk of Election Committees, do you mean that you would require them for the public service, or that if the present practice of conducting private as well as public business is discontinued, they will require two rooms?—They require two rooms in the first session of Parliament, but after the first session of Parliament there is very little public business done in that department; but the establishment must be kept up, because there are generally two or three Election Committees in every session.

46. What sized rooms would you recommend?—Rather larger than they had before.

47. Were they not very inconveniently small?—They were very small.

48. Did they not occasionally occupy other rooms in a great press of business?—No; the Clerk of the Election Committees, for copying minutes, might employ clerks in other departments who had nothing particular to do. I consider that the clerks are now very well accommodated in Parliament-street, and if such accommodation were given them in the new arrangements it would be sufficient.

49. What is the establishment for the Private-Bill office?—The Private-Bill office have four clerks; they must have one large room.

50. Sufficient for four desks?—A large desk across is the best.

51. And presses?—Yes; there should be a tolerably good room, with a good light, for depositing plans, that persons may be able to examine them; and I think they ought to have three small rooms besides those, for the examination of bills with prints and ingrossments.

52. That is making in all five rooms?—Yes.

53. And spare desks for strangers who want to consult the plans?—Yes, there ought to be a desk or table in the plan-room.

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54. You propose to have one large room for the four clerks, one room in which the plans may be deposited to be inspected, which must be a light room, and two or three rooms for comparing the ingrossed bills with the printed bills?—Yes.

55. And of such a size as to allow room for presses?—Yes.

56. How many have they now?—They have one large room and two small ones, in one of which the plans are deposited, but I think the plans ought to be deposited in a room by themselves; perhaps four rooms might be enough.

57. One of them being a large room, and the other being as contiguous as possible?—Yes; I mean, in all those offices, that the rooms I have mentioned should be connected together.

58. What becomes of those documents and plans after the session is over?—They should be delivered over to the Clerk of the Journals and Papers, but they are all burnt now.

59. If it were not for such an accident, they would be preserved, would they not?—They would.

60. All those offices ought to have a sort of warehouse-room attached, ought they not?—I think that all the offices should give up their papers and plans at the end of the session to the Clerk of the Journals, and that all the warehouses should be under the Clerk of the Journals.

61. Then their rooms must be very extensive?—Yes; but there were a great number of papers kept that were of no use in keeping.

62. But every thing in the nature of plans that may be referred to at a subsequent period, should be preserved?—Yes: the originals of those plans are deposited with the clerk of the peace in the different counties, and the parties generally consult those plans; duplicates are deposited in the Private-Bill office when the petition is presented.

63. How many rooms would be necessary for the Clerk of the Recognizances?—One room.

64. Should that be placed in a particular situation?—I think it should be connected with the office of the Clerk of Elections.

65. And accessible to the public?—Yes.

66. Which of the rooms ought to be most accessible to the public, of the rooms you have mentioned?—The Clerk of Recognizance ought to be open to the public, because there are a great number of notices left with him.

67. And the Clerk of the Elections ought to be easy of access, since there may be great number of persons coming to him, ought he not?—Yes.

68. Would you say that it is a great object that the Committee-clerks' office and all the offices should have such means of access to the public as not to interfere with the Members going into the House?—Yes.

69. That is, to have a separate entrance for strangers and for Members?—Yes. The lobby of the old House used to be very much incommoded with strangers going to the offices.

70. Then the Clerk of the Ingrossing-office ought not to be far from the House, ought he?—No, he must be close to the House, for the purpose of having titles of bills ingrossed. There ought to be an office for the compiling of the votes, an office for such part of the business of the office of the Public-Business as is connected with the table, and an office for ingrossing riders and titles of bills, immediately connected with the House, if it should not be found convenient to bring the whole of those departments close to the House.

71. Would it not be very convenient to have the committee-room for the drawing up of petitions very close to the office at which the petitions are lodged?—Yes, I think it would be very convenient that there should be a committee-room near the place where the petitions of the session are deposited.

72. But whether near to the House or not, is not of much importance?—Yes, the office for depositing petitions ought to be near the House, because the petition may be wanted in the House.

73. And also you think there should be a room for the Committee upon those petitions, near that office?—Yes.

74. Does it not happen continually that Members are desirous of making reference to petitions or documents belonging to the Journal-office, which it is extremely inconvenient to have brought from the Journal-office to examine, and which might be examined in that room?—Yes; this room for the deposit of petitions would in fact be part of the Journal-office.

75. How

75. How many rooms ought the Speaker's Secretary to have?—He ought to have two rooms; one for himself, and the other for strangers to wait in.

76. Did not the late Speaker's Secretary employ an assistant?—Yes.

77. Would it not be necessary to have an additional room for the assistant?—No, I think not.

78. When he employed an assistant, was he himself present?—I do not know anything of that. I think in the beginning of the session the Speaker's Secretary has employment for two assistants.

79. Would it be fair to demand for the Speaker's Secretary more than two rooms, considering the other demands of the officers of the House?—No, I think that two rooms would be ample accommodation: all the persons that come with accounts and to attend the House of Commons, physicians, masters in Chancery, who come to give evidence, generally wait in the Secretary's room.

80. But do they not go to the Secretary's room rather in consequence of the situation of that room next to the lobby, than in consequence of the propriety of frequenting the room belong to the Secretary?—Yes.

81. Would it not be better to have a room set apart specially for persons of that description?—Certainly.

Mr. *Seymour*.]—They interfered very much with the business of the Secretary.

Mr. *Ley*.]—I think that the Secretary should have a decent room for himself to sit in, and have a kind of office where strangers might come to wait, or a clerk that he wishes to assist him.

82. Then in addition to that you would propose that there should be some room for persons of a high condition to wait in, before they attend the House?—Yes; such as masters in Chancery, or the sheriffs of London.

83. Where should the Secretary's room be situated; should it be in the vicinity of the House, or in the vicinity of the Speaker's house?—It should be in communication with both.

84. Where would you have the waiting-room that you speak of?—That should be close to the House; if you make the waiting-room separate from the room of the Speaker's Secretary, it is of no great consequence that the Secretary's room should be near to the House.

85. If you have no waiting-room attached, the Secretary's room should be placed rather more for the convenience of the Speaker than for the convenience of the House?—Yes; but there should be easy access to the public at the same time, because persons come to that office for business; I think the lobby should be kept free of all those persons.

86. Is it necessary for the Chaplain to have a dressing-room?—Yes, I think it is.

87. Had he a room formerly?—Yes, close to the Secretary's room.

88. With regard to the Committee-rooms, what from your experience of the usual number of Committees, taking in the first session of Parliament as well as subsequent sessions, should you say would be the proper number of Committee-rooms; how many were there formerly actually used as Committee-rooms?—I do not know exactly; I think there were 16 that you might call committee-rooms; that included the smoking room; the library took away two rooms.

89. Were there rooms enough formerly?—In particular times of the session there were considerable complaints that there were not a sufficient number of Committee-rooms.

90. Would it be justifiable to erect so many Committee-rooms as to preclude the possibility of complaints at any one particular period of the session, when there were a great number of public and private Committees sitting at the same time?—I think regulations might be made in respect of the number of Committees that should sit on each day; I do not think that the House of Commons can give Members sufficient for above 20 Committees in a day, to conduct business properly. I think there were full as many Committee-rooms as could be properly employed last year, but they were very small and inconvenient.

91. Do you conceive that 24 Committee-rooms would be ample for the fair transaction of business of Committees?—Yes.

92. Are you aware, when a Committee is sitting three times a week, and there are voluminous documents which the Chairman and other Members of the Committee may have to consult, it is very inconvenient that another Committee may in the intermediate day occupy the same room?—Certainly I am; and if you do not mind the expense and have sufficient room, the greater number of Committee-rooms

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you can build the better. What I mean to say is, that the business of more than 20 Committees cannot be transacted at the same time with any degree of satisfaction to the public or private parties.

93. Would it not be desirable to have one large apartment exclusively for those Committees where little or no opposition was anticipated, in which to hold as many Committees as might be going on at the same time?—I think it would; I think one large room in which unopposed Committees should sit, would be convenient. If you have a certain space to build upon, I should not like to see, in order that Committee-rooms might be erected, the offices for the clerks diminished in number and in size.

94. Would the present establishment of clerks be competent to supply 30 Committee-rooms at the same time?—No, certainly not.

95. Is it not the habit, when there is a great press of business, to employ assistant-clerks?—You may have clerks from the other offices: for instance, if there is a great press of committee business, you may take clerks from the Journal-office or from other offices. I think, as long as you get a proper accommodation for all Committees of inquiry, the private business ought to accommodate itself to the rooms, and not the rooms to the private business.

96. Might not an arrangement be made so as to prevent any inconvenience or extra expense in prosecuting those private bills, particularly where they are not subject to any serious opposition?—Yes, I think so.

97. And preventing all the private Committees being appointed at the same time?—Yes. I do not think last year there were more than 10 Committees of inquiry appointed to sit on one day.

98. Might not an arrangement be made, without increasing the expense or trouble to the parties, by which a great press of private business might not come on on a particular week, or a particular day, but be more distributed?—Yes; when there is that great press. Those private Committees are generally over in one day.

99. Are you not aware that the principal reason of the majority of Committees on private bills being deferred till after Easter is, that previous to that time the solicitors and parties principally engaged in them are occupied at the assizes?—They may come up immediately after Easter; the last day for reports is fixed the 8th of May, and they have all that time.

100. With regard to the necessity of an official residence for the Clerk of the House, do you think that is necessary for the due transaction of his business?—I think so.

101. Will you state for what reason?—I think he ought to live at the office; that is a matter that has been inquired into by former Committees, and they came to that opinion. I think that the Clerk of the House of Commons, who may be called the staff officer of the House, ought to have an official residence; having constant communication with the clerks, he ought to live at the office, and have them under his superintendence.

102. Does that apply to him more than any of the other clerks?—Yes, I think so; because all of those offices are offices of the Chief-clerk.

103. What sized house ought he to have?—It should be such a house as the Clerk lived in before; that house was built in the year 1760, purposely for the Clerk, and I think it could not be smaller than that.

104. What sort of sized family could live in it; was it an ample space for a large family?—No, it was not.

105. What did the house consist of?—There was a library and a dining-room, and a small room, which was a small store-room; the kitchen was a detached building on the same level, and on the first floor there were three rooms; on the second floor there were three rooms, and garrets. The front of the house was 44 feet.

106. Is not the Chief-clerk the only patent permanent officer of the House, under whom all the other clerks act, by whom they are appointed, and by whom they are also superintended habitually by daily intercourse?—Yes.

107. Could not that superintendence be exercised without an official residence?—I think it is more convenient for the House of Commons, and for the Clerk, that he should be constantly living at the spot.

108. Do you not contemplate that there will be some inconvenience in having either too large or too small a house, according to the size of the family or the private fortune of the person holding that office?—I think the Clerk of the House of

of Commons ought to keep himself in a very respectable situation of life if he accepts that office. *John H. Ley*, Esq.

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109. Is the house you describe too good a house for a person receiving 2,000 *l.* a year?—No, I do not think it is.

110. Has not the Assistant-clerk at present a house found him?—Yes.

111. Supposing that the Assistant-clerk were to give up that house, would that house be available for the Chief-clerk; and would it be necessary for the future Assistant-clerk to have a house; is it necessary to have more than one Chief-clerk on the spot?—I think it is; he must have either a house or an apartment. If the House of Commons were to sit from three o'clock to three o'clock in the morning every day, they must have apartments.

112. The third Clerk has no house, has he?—No; he has a room to dress in.

113. Do you conceive that it would be highly expedient that the Clerk-assistant should always have an official residence?—Yes.

114. Is it your opinion that the Clerk-assistant's house should be such as you have described the Chief-clerk's to be?—No; I say that it is necessary for the Clerk to have a house, and to be constantly living at that house; it would be very convenient that the Clerks-assistant should have houses there, or apartments in which they could sleep, but not absolutely necessary.

115. Is the Assistant-clerk's house found for him out of the House of Commons?—Yes.

116. Is the situation inconvenient?—Yes, I think it is; both the Clerks-assistant ought to have two rooms, and an apartment in which they can sleep.

117. But you think it would be more convenient if the Clerk-assistant had a house as well as the Clerk?—Yes, I think so.

118. Why should he have a room to sleep in?—Because he has to stay half an hour or three quarters of an hour after the House is up: if a Member is ill he can lay up: last year I should certainly not have been able to attend the House, if I could not have gone from my own house into the House of Commons, for two months.

Henry Seymour, Esq., called in; and Examined.

119. YOU are Serjeant-at-Arms of the House of Commons?—Yes. *H. Seymour*, Esq.

120. And, as such, you are the official Housekeeper?—Yes.

121. That part of the business you execute by a deputy-housekeeper?—Yes, who has always been resident in the House.

122. That deputy-housekeeper is Mr. Bellamy?—Yes.

123. Have you any official residence or official apartments in the House?—No, only a dressing-room.

124. Had the deputy-housekeeper any official apartments?—He had.

125. What were they?—The deputy-housekeeper had two sitting-rooms and two bed-rooms, and also four bed-rooms for servants.

126. Were those servants employed for the public?—Yes, for whom he is allowed a certain sum; there was also a room for stores of every sort, which used to be in the roof of the House, but there were afterwards different arrangements made. The two prison-rooms were considered as in his care; the Members' dining-room, and the kitchen, and the things belonging to it, a larder and cellar for wine, and a cellar for coals and wood, and vaults; all that was in his keeping, and considered as appropriated to him.

127. Were there any apartments for individuals taken into custody?—The two prison-rooms.

128. When not so employed, had Mr. Bellamy the use of them?—He was allowed to use them of late years; but they were always ready at a moment's notice.

129. Were they both bed-rooms?—They were.

130. From your experience, do you think two rooms of that nature sufficient?—No, there ought to be an additional waiting-room for the messengers; it is necessary that a messenger should be waiting.

131. Then you would think that two rooms for that purpose, capable of being separated, and a third room for a messenger or attendant, close by them, would be sufficient?—Yes, there should not be less than that.

132. With regard to the messengers generally, had they any room belonging to them?—They had a room in which to make up their books and papers; a sort of lobby.

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133. Should the messengers have a room specially adapted for their purposes, in your opinion?—I think so; I think it is not possible to do without one.

134. Is one sufficient for all purposes?—One for the messengers, I think is.

135. What would you think necessary for officers of other classes?—I think it would require not fewer than there were before; one for the upper-doorkeeper and one for the lower-doorkeeper, supposing that the House is so constructed as to require a separate lower-doorkeeper.

136. Had they a room?—They had a small room in the lobby to keep their accounts.

137. But that must depend upon the number of accesses that are to be laid open to the public or the Members?—Yes, it must.

138. When you have mentioned rooms, do you mean that there were distinct apartments, or were they not more like closets?—They were more like closets, but an additional one was allotted to the doorkeepers the session before the last.

139. Were they sufficient for the purposes?—They were.

140. Were there fires in them?—No.

141. Were fires necessary?—No, I do not think they were; the doorkeepers require a place in which to get their meals occasionally.

142. Might there not be a considerable degree of abuse encouraged if rooms for the doorkeepers or messengers were made too comfortable, or were too much removed from observation?—I do not think there is, but it is possible there might be.

143. In point of fact, do you think there is any necessity for the messengers and doorkeepers having a room apart from the room to which strangers would go, a private apartment separate from the public rooms?—I should think it absolutely necessary that they should have a place for their papers, and for other purposes connected with their duties.

144. Should not that be in close communication with the other rooms?—I think it should.

145. What papers have the doorkeepers?—The doorkeepers have a great many papers connected with the business of the House.

146. Do you mean those actually standing at the door of the House, or those at the outer apartments?—Those at the door of the House.

147. Then you think that they want a closet for papers, but not any room to which they themselves may go?—Being always present, it is necessary for them to have a room for one of them to go to take refreshment.

148. With regard to messengers, the Committee understand you to say that you think there should be some place into which they should deposit papers entrusted to them, but it should not be a place to which they can go and carouse and loiter away their time, instead of attending their business?—Yes.

149. Would a lock-up closet be sufficient?—They must have a place in which to write, because they have to make up a book in which are entered the orders of the House.

150. What orders do you refer to?—All the orders which they are entrusted with the delivery of, and which they enter in books and bring me every week, and all their charges in reference to the House.

151. With regard to the doorkeepers at the entrance of the premises, where the Members' great coats and so forth are kept, is any room necessary for them?—No; there happened to be a closet within one of those rooms, which they made use of, I suppose, for themselves.

152. Do you think it is advisable that that should exist again?—Those that are required to remain there from the morning to the middle of the night would require some place; Members would not like that they should be taking their meals in the room to which they were themselves going. I should not say that they were necessary for the messengers, because they might relieve each other and go away to take their meals, and they do so; but a person in the care of the waiting-room must remain there.

153. With regard to the rooms necessary for the deputy-housekeeper, what amount do you think he ought to have for his private accommodation, considering that he should reside within the walls of the House?—I think it is absolutely indispensable that he should reside, to take precautions against fire and so on.

154. How many rooms do you think there ought to be allotted for him?—I do not think he ought to have fewer rooms than he had before.

155. Do you think he ought to have apartments sufficient for a single man, or for

for a man with a wife and family?—It has always been considered that he should have his family here, and the Serjeant had formerly an official residence in the House till my predecessor's time, and when that was given up it was required that the deputy-housekeeper should reside in the House with his family.

156. Would you contemplate that he should have apartments sufficient for himself and his wife and family?—Yes, I should think so.

157. To what extent should you think that ought to go?—I should think two sitting-rooms and two bed-rooms would not be too much; and two other rooms and store-rooms he would be required to have somewhere, and three or four small servants'-rooms.

158. And a kitchen for his own use?—He had a kitchen for his own use; I think he had the whole of the space above the House, till within a late period, which was divided off into different rooms, but when the ventilation of the House was improved they were swept away.

159. Then you would conceive that he should have four bed-rooms or two sitting-rooms and a private kitchen?—That would depend upon the situation of the other kitchen, if he was allowed to keep the coffee-room.

160. For the purposes of accommodation to Members, what establishment do you think he ought to have?—There should be one large kitchen.

161. Would you conceive it desirable, in building this new kitchen for the dining-room, that that should also be available for Members to dine?—I should say that it was much better that it should not be so.

162. Might not a direct communication be obtained with the kitchen without Members dining in it?—Certainly.

163. It would be more convenient in every way?—Yes.

164. Must not there be a scullery?—Yes.

165. And another room where tea and that species of refreshment may be served up?—There was that description of room.

166. Would it not be convenient to have a smaller apartment for wines and other liquors to be served?—Yes, I should say so; there cannot be any reason why rooms that are appropriated for Members' dining-rooms should not, if no objection be felt, be used as committee-rooms occasionally when particularly wanted; they are not required till a certain hour in the day, after Committees are over.

167. Would it not be desirable that the apartments where the Members are to have refreshment, particularly dinner, should be rather more in number than one very large room; that there should be three or four different rooms, rather than one large room?—Yes, I should say so, provided they were all within reach of the kitchen, because it would be less disagreeable to Members; and you might appropriate one to strangers in that case.

168. Would it be desirable to have one apartment in which Members of the two Houses alone should be allowed to dine or take refreshment, and another apartment which might be common to strangers as well as Members?—I should have thought it would be more agreeable to Members.

169. How many rooms practically in the old House were allotted for dining?—There was only one and the kitchen.

170. Were those two rooms sufficient?—Yes, I think they were; the one was a very large room; but in the vicinity of the old House there was another coffee-house, which made a difference. I should say that they would be considered sufficient, supposing the other coffee-room to exist.

171. In addition to this, which was kept by the deputy-housekeeper, there was another coffee-house on the premises?—Yes.

172. Was the person keeping that an officer of the House?—No, he was not under my control.

173. Was not that coffee-house, to your knowledge, very much frequented by Members?—It was.

174. Would it be desirable to have a second coffee-house besides Mr. Bellamy's?—I do not see that it would, if you have more rooms in the one.

175. Do you think that any one kitchen establishment, without making it so great an one as to be inconvenient, would be sufficient to supply refreshment to Members upon crowded nights?—It depends upon circumstances upon which it is almost impossible for me to speak.

176. Do you think, from the representations that have been made to you, or from any other means of communication, that it would be desirable to have tea-rooms, and other refreshment, nearer the House than the dining-room?—It would depend

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depend upon the situation of the dining-room. It is desirable, I should say, to have the dining-rooms nearer the House than they have been; there would be a great convenience in not having a distance to go.

177. It would be desirable to have some place where that sort of refreshment might be had quite close to the House, would it not?—Yes, I think so; you should not be subject to have those articles brought from a distance.

178. With regard to the Vote-office, what sort of a room, or what number of rooms, should you think necessary for that?—There should be two together, as well as two others, a room within the other for immediate use; and there should be a store-room, and for collecting and preparing the paper to be sent out.

179. The Vote-office need not be very large?—It need not; and it ought not to be within the lobby, but should be very near the body of the House; there was great annoyance to Members from having it within the lobby, with the public going through.

180. You would therefore recommend that the Vote-office should be accessible to the public, but out of the lobby?—Yes.

181. Should the other room, the store-room, be a larger room?—The Vote-office should be the largest room, and a smaller room within that, and the store-room. The store-room formerly was under the long gallery, and there is also a large yard, with a great many buildings, which the officer hires himself.

182. Are they contiguous to the House?—It is not very close; it is a place in Abingdon-street.

183. What should be the size of the warehouse?—The warehouse should be very large for the stores.

184. The outer Vote-office should be fitted up with shelves?—Certainly, it should all be fitted up with shelves.

185. In the letter-office there must be two offices, one for the general post-office, under its own lock and key, and the other for receiving letters, under your immediate direction, must there not?—Yes; that has always been in the care of the deputy-housekeeper.

186. Then the post-office which is under you need not be a very large apartment?—No, not a large one.

187. Nor the other one, the general post-office?—No.

188. But they should be easy of access, should they not?—Yes; but there is no reason why they should be large.

189. Need the general post-office be contiguous to the House?—It had, I should think, better be central, because there must always be a bag or box in the Vote-office, and there is always one in the library and in the Members' waiting-room, so that if it is central I should think it would afford the greatest accommodation to individuals. It is necessary for the Serjeant and his deputy to have a small room each.

190. In the character of a dressing-room?—Yes.

191. Will you state how many servants' apartments ought to be provided?—I thought four sleeping-rooms seemed to be sufficient connected with the deputy-housekeeper's apartments.

192. In a large range of buildings, would it be desirable to have them distributed over the House, one at one point and another at another?—I should think they should be all together, because that is the only way in which the deputy-housekeeper could be responsible for fire and other things.

193. Is there a hall-porter?—There is a day-watchman and a night-watchman.

194. Are they in your department?—Yes.

195. What apartments do they require?—They had a room before; the day-watchman used it in the day, and the night in the night.

196. Is a waiting-room for the servants of Members required?—I think there should be; there was one before, the room that was used by the watchman.

197. Do you think it is desirable that it should be the same room that the watchman occupies?—I should say not; it would be desirable that there should be a separate room.

198. With regard to the arrangement for receiving the Members' great coats and umbrellas, and so forth, is it desirable that that should be done all in one room or contiguous apartments, or is it more convenient that Members should have different rooms in different situations?—Some Members like to leave their coats in the first room they come into, and some like to leave their coats as near the House as possible.

199. Did not that arise from the coldness of the passages that they passed through?—It arose more from the particular feelings of Members, which must depend upon themselves. I should say, if the passages were well warmed it would not be so essential to have any other place; but it is important that the Members should have a comfortable room in which to wait for their carriages.

200. With regard to the servants' waiting-room, you would not put that within the boundaries of the House?—It should not be a great way from the door or from the lobby of the House, I think.

201. Do the servants require a large apartment?—I should say that that ought to be a large room; there are sometimes a great many.

202. Was the room in the old House sufficient?—I think it was.

203. Do you think that it would be expedient that there should be two lobbies at the entrance of the House; one exterior, to which strangers should be admissible who wanted to speak to Members on their entering the House, and one interior, which should be accessible to Members only?—It would be desirable to keep strangers from the lobby just without the House.

204. Would it not be well, in addition to the servants'-room, to have an apartment for the lower class of witnesses before they are summoned up to the different Committees?—I should think it would.

205. Do you not think, with reference to the preceding question of having two lobbies, it would be of great importance that there should be an approach for Members to the inner lobby, without having the necessity of passing through the outer one, which should be the general approach for Members?—It would be desirable, certainly, that there should.

206. Do you think that strangers would come to the outer lobby unless they made sure that all Members coming to the House would pass through that lobby; is not the object of strangers coming to the lobby, to see Members coming to the House; and if there was another access to the minor lobby than through the outer lobby, would the strangers come there?—It would have the effect of preventing that.

207. Might not strangers congregate in one lobby, and send in to any Member that they wish to speak to?—If that outer lobby was not the only passage to the House, it would be a very convenient thing to Members approaching the House.

Mr. *John Bellamy*, called in; and Examined.

208. WHAT are you?—Deputy-housekeeper of the House of Commons.

209. What apartments had you as such in the old House of Commons for your own private use?—Two sitting-rooms and two bed-rooms.

210. There were also two other apartments in which persons taken into custody were placed?—There were, termed the prison-rooms.

211. Had you any rooms for your servants and others?—Four servants' bed-rooms.

212. Those servants took care of the House in general?—Yes.

213. And that you found sufficient?—I think that was sufficient, and would be in the present instance.

214. What apartments are there immediately connected with you, such as kitchen and scullery?—A kitchen, a dining-room, a scullery, a large store-room for general purposes, candles, soap, and other things, (a portion of which also held the tea-service which was prepared for the Members), a pantry and larder, with one or two closets for the stores of the House, meaning mops, brooms, and other matters of turnery that were delivered in at the commencement of the session.

215. Were those apartments sufficient for the wants of the House?—I think they were sufficient.

216. Then the kitchen was used very much as a dining-room?—Yes.

217. The rule was, that none but Members might dine in the dining-room?—Yes.

218. Was there accommodation sufficient for the Members in that dining-room?—Occasionally great accommodation; for it should be understood that the attendance of Members there, though sometimes very numerous, was sometimes very scarce, depending entirely upon the debate, or the business of the House.

219. In arranging the new House, do you think it would be desirable to have more accommodation provided than was formerly provided?—I do not think it is necessary, unless there was such an establishment that by subscription a dinner could

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regularly be provided for the Members; for at present it is a matter of so great uncertainty, that I think nothing but a beefsteak or chop could be provided without a serious loss to the person providing it.

220. Do you think it would be desirable to have two dining-rooms instead of one?—I think it would depend upon the dinner that the Members would wish to have; if it were a dinner of soups and stews, a different dining-room would be necessary, and then a subscription to ensure a certainty would be necessary.

221. Under any circumstances would it not be preferable that the kitchen should be detached from the two rooms, one appropriated to Members, and the other to Members and strangers?—I should say not; for many of the Members who attend upstairs decidedly prefer the kitchen to the other room during the winter.

222. Are not the emoluments that you receive from your situation as deputy-housekeeper principally derived from the profits received from the coffee-room?—No, I have other emoluments; and I conceive that the coffee-room, with the exception of two sessions, has hardly ever realized me any profit whatever.

223. What are the emoluments that you receive?—I have enumerated them in my evidence before another Committee, on fees.

224. What are your emoluments altogether?—Under 500 *l.* net.

225. You do not include the coffee-house?—Not at all; it rarely happens that that is ever a profitable trade, from the number of servants that are required and kept on during the whole year, which is necessary to be done.

226. Then the emoluments and large salaries attached to the housekeeper entirely go to Mr. Seymour?—The whole of the Serjeant-at-arms' fees are paid to the fee account, and which I deliver to The Speaker.

227. Out of that fund the Serjeant-at-arms receives his 2,300 *l.*, and the deputy 1,000 *l.*?—Yes.

228. Will it be convenient in any new establishment to have tea-rooms, and the power of making tea as well as drinking it, contiguous to the House, which has been the case hitherto?—I should say both tea and dining-rooms should be as near the House as possible, for the convenience of the Members; nor do I well see that they can be separated at any great distance.

229. Practically speaking, can you say whether the institution of refreshment in the lobby has diminished the demand for refreshment in your tea-room?—Not of the tea-room I think at all; I think there were 100 Members or more who took their tea or coffee on one evening last week.

230. During the last session of Parliament or the preceding session, did you find that that refreshment in the lobby was more popular than the tea?—No; I think that the tea was taken as much as before.

231. Do you think, that being the case, that it would be desirable to have that species of refreshment in the lobby more contiguous than it would be possible to have a tea-room?—There can be no doubt that the present arrangements in the lobby are very convenient to the Members, but still I think that the tea is a very desirable thing, from the vast number of Members that take it; I should say generally that it would be desirable to have all the refreshment as near as might be to the House.

232. With regard to the place at which Members should leave their great coats, suppose the access and passages from the outer hall were made of a proper temperament, would it be of more or less convenience to have them in one apartment?—I think they should be in separate apartments; there are some Members that like to leave their coats immediately they enter, but others like to leave them as near to the House as possible.

233. The Committee contemplate that the communication from the House was well warmed from the moment you enter the outer hall till you enter the House; in that case where should the apartment be?—Then I should say that one general room would be more convenient.

234. Are there any suggestions with regard to the apartments or the rooms in which the messengers or doorkeepers ought to have the power of taking refreshment, which you wish to make?—I think the doorkeepers and the messengers, as they are constantly here on duty, should have some apartment for them to take their refreshment in.

235. Is it not desirable that that should be as much under the general eye of yourself, or other persons having control over them, as to prevent them from spending their time there and drinking?—For that purpose I have often asked them to

go

go up to my rooms to get their refreshment, at so moderate a price that they should not have an inducement to go elsewhere. Mr. *John Bellamy.*

236. Would it not be desirable to have apartments for them, in which to take refreshment under your supervision?—It would be desirable they should have an apartment for their refreshments. 11 March 1835.

237. Is there any necessity for much cellarage connected with your department?—I think not.

238. Where were you in the habit of keeping your wine?—Under the House of Commons.

239. The cellarage you require is not great?—Not very great; I have a stock of 2,000*l.* worth of wines for the express use of the House of Commons, at present under the building.

240. And the cellarage is used for coals also, is it not?—That is a distinct cellarage.

241. Is much cellarage necessary for that?—It was so; and I was in the practice of purchasing the coals for the House to a large extent; but now that they are sold by the ton, and no advantage from ingrain, I see that it will be more convenient to take them in as wanted by 10 or 20 tons at a time, a contract being made at the end of each session for the subsequent year; small cellarage therefore would be sufficient.

242. From your experience, can you state at all whether the cellarage was damp or unfit for papers?—I think there was no cellarage that I had the care of but what would be unfit for papers, though, by the means of flues, they might be made perfectly dry.

243. Then, except there were a subscription among the Members, you think it would be impossible to conduct a coffee-room more in the way of a club coffee-room than at present?—That is my opinion; to do more than to prepare a mutton-chop or steak without a subscription would be impossible.

244. That is, larger fees to the Serjeant-at-arms than at present would be necessary?—I do not see how they are connected.

245. Can you account for Alice's Coffee-house, which had not all the advantages that you had, keeping on as a coffee-room?—I do not know how to account for it; in fact I have very little knowledge of coffee-house keeping. The servant whom I have is a most worthy person, and conducts it very well; I superintend it, but I know but little of the minor arrangements.

246. You admit the fact that that other coffee-house did go on for many years, and had not the advantages that you had?—Then it must be kept in view that the other coffee-house had the advantage of the gowns and wigs of the lawyers, who paid a large subscription for the purpose, and was kept open the whole year; whereas the refreshment rooms of the House of Commons are only open during its sittings.

247. Then the best mode will be to admit the lawyers into partnership with the Members in that respect?—Certainly.

248. Have you any suggestions generally to make, as to what you think the accommodations of the deputy-housekeeper ought to be?—I gave a list to the Serjeant-at-arms of the different rooms in my department, and I thought that those would be sufficient for the new House.

Thomas Vardon, Esq., called in; and Examined.

249. YOU were Assistant-librarian before you became Librarian to the House of Commons?—I was. *T. Vardon*, Esq.

250. And therefore you are cognizant of all the changes that have taken place in the library?—Yes.

251. Was the library that was burned down, enlarged as it was by the room above, sufficiently commodious, first of all, for the books, and next, was it large enough for the Members?—It was full at the end of last session.

252. Without the power of receiving fresh papers or fresh documents?—Yes, and committee-rooms 20 and 21 were also filled with the books.

253. How soon was that accumulation made after the addition to the library?—In three years after the rooms were built. In addition to the purchase of books, there was the present of the French Chamber; this made as great an increase as we ever had in a short time.

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254. But that was a special increase, not likely to occur every successive three years?—No, but there was at all times a gradual accumulation.

255. Have you considered what space ought to be allotted to the library?—The length of two rooms that were formed into an upper library, and the under room that was built for the purpose of a library, were each 55 feet long by 23 wide; they were 13½ feet high. This space had already become too small; besides space for books, there should be sitting room for 70 or 80 Members.

256. Then it was twice 55 by 13½ feet high?—Yes; less the space for windows, as applicable to bookcases.

257. Do you know what was the superficial extent of bookshelves?—No, I do not; that appears in a Report of the Committee of 1832.

258. Do you know what has been the superficial extent occupied, on the average of the last three years, by each year's sessional papers?—That appears also in the Report of 1832.

259. Was the room above exactly of the same size as the room below?—Yes; but it contained more books, as it was divided into two rooms.

260. You had not bound up the Lords' papers; you had a complete set of papers, and it was intended to have them bound up, was it not?—Yes, and that collection alone would require considerable space.

261. Then if provision was made for the Lords' papers, that would require a much greater annual addition of shelf-room?—Certainly it would.

262. In contemplating an increase of accommodation, do you think it would be desirable to have the library in one room, or divide it?—I think it would be better to have more than one room, for several reasons; first, as the library is made a writing-room to some extent, it might be so arranged that writing should be confined to one room, while those who frequented it for study might have a quieter place to resort to. If it was one large room, the banging of the door, or the writing or talking, might disturb those who wished to read.

263. How do you think that you might effect the object of making the library merely a room to which Members might come to read and consult papers?—As it is quite impossible that the Librarian can request the Members either not to talk at all or not to talk loud, the only means that appears to me feasible is, so to arrange the library as that the writing-room should be between it and the House, or in such a position as to make it a more convenient place for writing and conversation than the other rooms.

264. The upper room in the old library, in consequence of its being the less accessible, was a quiet room, was it not?—Always very quiet.

265. Then you would propose to make the exterior room a more convenient room for conversation or writing?—I should say, if it was divided into three rooms, I should try, by putting the post-boxes and by having easy access to the House in the outer room, to make that a writing-room, and then the main library might contain all Parliamentary books of reference for the use of the House and Committees, and might be used as the business library. The inner rooms would more particularly contain the literary or historical books, and be therefore necessarily more quiet for the purpose of those Members who wished to study.

266. Would you contemplate as an advantageous arrangement, looking forward to the increase of books, that you should have the power of adding rooms upstairs?—Yes, upstairs; or if possible, on the same floor, which would be more convenient, because in every degree that the quiet library was removed from the House it would give the less inducement to persons to frequent it, since if Members could not conveniently reach the House for divisions, during the time the House was sitting no person could use the room.

267. Would it not be desirable, if possible, that the library should be in such a situation that in making successive further additions to it on the same floor, you might provide at any future time for accommodation for any number of books?—Certainly it would. I thought that if the writing-room for Members was sufficiently large to accommodate the House as a writing-room, and was immediately adjoining to the library, and under the control of the Librarian as part of the library establishment, it would afford a sufficient means of adding bookshelves or bookcases, and by this means three objects would be conveniently combined: viz. 1st, Members' writing-room; 2d, less influx and less talking in the library; and 3dly, a large space immediately adjacent to the library, which might not inconveniently be applied, as the books increased, to the purposes of the library, without altering its destination as a writing-room.

268. Was not the old library very defective in law books?—Yes, very defective.

269. Law books are very frequently referred to by Committees, are they not?—Very often.

270. Have you a good collection of old statute law?—Before the fire it was very good.

271. But not many books of recent cases?—We have no law library, which may be so called; we have works on election law, and Blackstone, and Burn, and a few others.

272. Was it not very frequently a subject of conversation among the Members to form a better law library?—Yes; the Attorney-general and Solicitor-general, at different times, have talked of making out lists, and applying to The Speaker.

273. The only impediment was the providing room for the law books, and the future additions of other books which will be necessary, was it not?—Yes; there was not room for them.

274. Do you not think that in any arrangements for the future House of Commons, it will be desirable to make ample room for the library?—Certainly; I should say that there is not a more growing library than the library of the House of Commons, and that that circumstance renders ample accommodation highly necessary.

275. All books of the session are delivered to the House, are they not?—Yes.

276. How are books obtained for the library?—By keeping a list, which is laid before the Committee when they meet, and they order such books as they think desirable, and previously by referring to The Speaker when a book was wanted. It has been suggested that if part of the library, the inner room for instance, were furnished with bookcases, as they often are at college libraries, extending from the walls towards the centre of the room, it would give more space for books, and form recesses for those who wished to be more retired for the purposes of study.

277. Will you state whether or not you think it is indispensable that the Librarian should have a contiguous house to the library?—The Library Committee reported that it was last year.

278. And has your subsequent experience confirmed or contradicted that Report?—It is a very personal matter; but I think it would be a useful thing, more or less, to the House, that the Librarian should be at all times on the spot.

279. By a house, do you mean house or apartments?—Either. I think apartments would be quite sufficient.

280. What apartments do you think there ought to be?—It becomes a very personal matter when I give evidence on this subject; but I should say, as a general rule applicable to official residences, that such accommodation should be given as is equal to the income of the officer to be provided for. In this case, a few bed-rooms and a couple of sitting rooms, &c.

281. How many hours is it necessary for you to be in the library?—I am there at 10 o'clock in the morning, and I generally remain till the House is up; I never leave the House till 12 o'clock. When it gets later in the session, and I begin to feel the wear and tear of late hours, I go away before the House is up, at 12 o'clock.

282. Do you always, whether the House is sitting or not, remain till 12 o'clock?—No; if the House is not sitting the library is locked at four o'clock, unless a Member should happen to be there.

283. Supposing the House breaks up before 12 o'clock, you do not remain then?—No; only till every Member in the library leaves it.

284. Had you not reason to understand that such accommodation as a house would be furnished to you?—After the Library Committee made a Report it was referred to the Official House Committee, who designated the house they thought necessary for the purpose; I believe it was the intention of the late Government to carry that Report into effect, as far as it was their ability to do so.

285. That house having been claimed by the Usher of the Black Rod?—Yes, I believe so.

286. You have an assistant-librarian, have you not?—Yes.

287. Do you conceive that he ought to have apartments in the House likewise?—I consider that it would be a great convenience if he had.

288. There are the same reasons for his having apartments as for yourself?—Yes, he has the same duties to perform, and the same labour in every respect; but as far as

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the correspondence and personal application of Members is concerned, every Member naturally consults the head of the department, and puts all his questions to him, and expects answers to letters from the Librarian himself, or the information desired given by him when present; but with that exception the labours of the assistant are the same as those of the Head-librarian.

289. During the vacation, when you are absent, does he take your place?—Yes.

290. Then it will be particularly desirable during that time, when you are absent, that he should be on the spot?—Yes.

291. Is any allowance at present made to you for house-rent?—None whatever.

292. Even after the understanding that you should have a house?—No.

293. Then you think that the House you should have, should have kitchens and all conveniences attached to it?—Yes.

294. Should there be beside the library any room for the Librarian immediately adjacent to the library, or should the Librarian sit in the library?—I think both Librarians should sit in the library, certainly, because the constant personal intercourse with them is so great that it would be impossible to carry on the business without.

295. Who at present takes upon himself to determine what different rooms in the House of Commons shall be appropriated to the different officers?—I think it is the duty of the Serjeant-at-arms.

296. Has The Speaker any power of deciding such points?—I do not think he has any.

297. Were the rooms which are now occupied as dressing-rooms by the Serjeant-at-arms intended to be a part of the library?—They were not intended to be a part of the library; Sir Robert Smirke intended it to be only the length that it is.

298. Has the Serjeant-at-arms the power of appropriating any of the rooms of the House, according to his own will and pleasure?—I think so; I think he exercises that power entirely.

299. You do not suppose that he would have power to do so in opposition to any resolution of the House?—Not at all.

300. Do you know anything of the circumstances in which the provisional library is made smaller than it was intended to be?—Members have complained very much to me of the size of the library; they are continually doing so every day and every night, and Sir Robert Smirke did once mention to me that several Members had complained of the circumstance, and his reply was that he had built them for offices, and that beyond that he could not control their appropriation in any way.

301. Do you think that it would be expedient that there should be a standing Committee of the House, to determine upon the appropriation of the different offices to the different officers of the House?—I think it would be a very good thing.

Veneris, 13° *die Martii*, 1835.

THE RIGHT HONOURABLE LORD GRANVILLE SOMERSET, IN THE CHAIR.

Thomas Vardon, Esq., called in; and further Examined.

T. Vardon, Esq.

13 March 1835.

302. HAVE you made any calculation, from the Report of the Library Committee of 1832, as to what would be the least amount of shelf-room that would be required in the first instance, if their recommendation of the books to be placed in the library were followed?—It would be necessary of course to start with exactly the same superficies that we had before, for it was completely filled. The natural annual increase of the papers of the House of Commons alone is 60 volumes, including large folios and small folios, not descending to octavos.

303. What room do those papers take?—It takes 10 feet in length by two in height.

304. Are there any other annual papers besides the House of Commons papers that would be required?—There are the Colonial Laws, which for the last two years have rapidly increased; because, on the recommendations of the Committee of 1830, followed up by that of 1832, the Government have directed all Colonial Laws to be forwarded to the Foreign-office, for the use of the library of the House

House of Commons. In consequence of this direction, the increase has been about nine folio volumes annually from that source alone. The Government have also requested the French Chamber to forward their annual papers, which they exchange for ours; also the governments of the United States and Belgium, and Canada. Those of France were received at the end of last session; those of Belgium are ready, and the Canada journals and papers were regularly received. The necessary space for them annually it is almost impossible for me to say; but the first set that we received from France amounted to 600 volumes, but that included their arrears. The amount of necessary annual increase I cannot quite calculate; but taking them altogether it must be considerable, viz. the colonies and foreign governments.

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305. Is there a Library Committee summoned to meet at any early period?—I am directed by The Speaker to summon a Committee for Saturday week.

John Bull, Esq., called in; and Examined.

306. YOU are Clerk of the Journals?—I am.

John Bull, Esq.

307. What is your establishment?—The establishment consists of seven clerks, besides myself.

308. Do you contemplate any diminution or increase of that establishment?—No; if the business goes on as it does at present, I should think the establishment fully equal to the business done.

309. Is it more than equal to the business?—No; the business is more likely to be increased than to be decreased.

310. The getting rid of the manuscript copy of Journals does not occasion a decrease in your establishment, does it?—No, it does not; that was done by the clerks in spare time; the fact is that the clerks attend in summer, but they have not so much to do as they had.

311. Is that suggestion of the Committee followed, that there should be a printed copy on vellum?—There are three copies printed on substantial paper, not on vellum, but very fit for the purpose.

312. Then the probability is that your establishment will be the same as it now is?—Yes, I should think so.

313. There are eight desks including your own?—Yes.

314. Is it desirable that those eight desks should be placed in one large room, or would it be better to have them divided into two rooms?—It would be proper that there should be one large room for the clerks, and another room, fitted-up with books of reference, for myself.

315. What sized room for yourself; what is the extent of shelves and books of reference required?—It would be difficult for me to answer that question: a set of Journals, a set of Statutes, and a great number of other books; we should have the Lords' Journals, and there should be also presses to put papers in which should be more immediately under my own eye and under my own care.

316. A room of the size of Committee-room No. 2?—Yes, that would do for the clerks; the room that we had before was a tolerably large room, but that was found not large enough.

317. What apartments had you in the old House?—I had one large room, which was found not large enough, in which I sat myself with the clerks; I had also a private room, which was so inconvenient that it was not used to the extent that it would otherwise have been, and that room was used for an examining room in addition to the other that we had for that purpose.

318. Then you would require one large room for the clerks, and one room fitted up with shelves for yourself?—Yes; one large room for the clerks, and one contiguous to that for myself, and two rooms for examining Journals and sessional papers.

319. What should be the size of those rooms for examining?—I should think 16 or 18 feet square; 16 feet square might be large enough for those.

320. Somewhere between 16 and 20 feet?—Yes.

321. Which of those four rooms should be the best provided with light?—All of them should have good light; the large office in which all the clerks would sit should be well lighted, and also the room for the Clerk of the Journals.

322. More so than the examining rooms?—They all require good light; the nature of the business is such that they cannot do without it.

323. Then in addition to those rooms, which may be called your offices, what amount

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amount of warehouse-room would you want?—I have been considering that subject, and it appears, in consequence of the prodigious increase of business, and from the enormous quantity of petitions, if the same system is continued of keeping them, and having schedules made out, one session will require from 250 to 300 cubic feet of space to put by the papers in, as near as I can calculate it.

324. Then the petitions of the session are placed during that session upon the shelves in the Journal-office?—Yes, in an office contiguous to it.

325. Do you think that it would be convenient that the Committee appointed to examine the petitions should be immediately adjacent to the room in which the sessional petitions are deposited?—There is no doubt that it would be a great convenience to the Members of that Committee, and to all the clerks employed, and to everybody.

326. Might they meet in the very room in which the petitions are deposited, or should it be a room adjacent?—The inconvenience of meeting in the same room would be, that the room would be frequently occupied; it must be a separate room.

327. Would it be desirable to have a particular warehouse in which to stow away those sessional papers?—I think that spaces might be found in different parts, because it is not so essentially necessary that they should be contiguous to the offices; any part of the building where they may be preserved dry would do.

328. Do you contemplate a room set apart for no other purpose but receiving petitions and papers of the session, or do you conceive that you could put them away in those rooms which you and your clerks were to occupy?—I have no doubt that one of the rooms might be fitted up with shelves to hold all the papers of the session, and still that it would not interfere with the use to which that room would be appropriated.

329. And to that extent it would be more convenient, because it would be close to your office, would it not?—No doubt it would.

330. When the session is closed, is it in your department to see those papers stowed away?—It is; all the papers except Committee papers; they are all under my care, and in the summer they are arranged and numbered, and made into proper portable bundles, and a schedule made of them, so that at any period we can find a petition or anything else.

331. Are not the papers before public Committees stowed away in the same manner?—Exactly, those that are reported to the House; but if any remain with the Committee-clerks that are not reported, we do not get possession of them; in fact, those papers that come to us are those reported by the Committees.

332. Suppose a Committee has not reported, what becomes of the papers?—They remain in the hands of the Committee-clerk.

333. Was there any warehouse in which the Committee-clerks deposited unreported papers?—They had boxes under the roof of the House of Commons, and presses, which were very inadequate for the purpose of keeping those papers.

334. If there were extensive vaults under the House of Commons, which were dry, would they answer the purpose?—No doubt they would; any place would answer where the papers could be preserved; but if it was at all damp, of course they would be destroyed.

335. Were all the unreported papers to which you have referred as being in the care of the Committee-clerks, and in the roof of the House of Commons, destroyed at the time of the fire?—They were.

336. Was the library which was discovered in the Ingrossing-office, and which formed the subject of a letter from Sir Henry Ellis, Chief-librarian of the British Museum, to the Chairman of the then Library Committee, entirely destroyed?—It was.

John Edward Dorington, Esq., called in; and Examined.

J. E. Dorington, Esq.

337. WHAT office do you hold?—The office of Clerk of the Fees of the House of Commons, and I have also the management of all the public bills.

338. What is your establishment?—I have four clerks on the establishment, and three writing-clerks who do not belong to the establishment.

339. With regard to those four clerks, are they all occupied in public business?—They are almost entirely occupied in public business.

340. What are the three clerks occupied in?—They are occupied in my private business, but also in a great part in copying, &c. for the public business.

341. Suppose

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341. Suppose the system of persons in your situation transacting private business should be discontinued, what would be the establishment in that case?—The public business could not be conducted, I am confident, with a smaller establishment than I now have.

342. What were the apartments you had in the old House of Commons?—Four rooms.

343. Were they sufficient in accommodation?—They were sufficient in number, but one of them, in which the four clerks sat, was very inadequate in size; it was an extremely small uncomfortable room.

344. It was a passage to the Chief-clerk's house, was it not?—It was.

345. Then with regard to any fresh rooms, you conceive that four in number, but rather larger in size, would be sufficient?—Yes.

346. Do you contemplate any increase or any diminution in your establishment of clerks?—I do not at present contemplate either the one or the other.

347. Is it quite adequate?—It is.

348. Would it be desirable to have one large room and two small rooms, instead of four rooms?—No; because I should think that the head of the office should have a room for himself, as he has been accustomed to have; and there must be one room in which examinations can be carried on apart from the other rooms, where the different clerks sit.

349. If there were one large room and two small ones, would not that answer the purpose?—It would not; the head of the office should have a room to himself; then the four clerks should have a room; the three writing-clerks another room, and there should be one room to be used only occasionally for the purpose of examinations. A part of the establishment might go away there, in order not to be exposed to interruption. The ingrossment-roll is examined in my office, and unless great care is taken with that part of the examination, very serious errors may arise.

350. That would be two small rooms, and two rooms with desks for clerks?—Yes; one of those rooms of a moderate size for myself, and one for examinations.

351. Does your office require more than ordinary light?—It should be well lighted.

352. Should that small withdrawing-room that you spoke of be particularly light for the purpose of examining papers?—No, they can sit close to the window for the purpose of light; it should certainly, however, have a good light.

353. Do you want any warehouse-room for your department?—No; in these rooms we must necessarily have presses almost all round them, of about 18 inches deep, which will take off very much from the size of the room.

354. Where did you stow away in the old House that which you contemplate placing in presses?—We had presses in all the rooms; I had also two deep closets in the passage to the rooms, and a large press in the long gallery.

355. Are those presses that you speak of filled during the recess?—They are filled with the books that we have inevitably to use, and also a considerable supply of stationery I am obliged to keep for the use of several of the offices of the House, and also in part for the table.

356. But there are no documents stowed away there of public importance, are there?—No, except the drafts of public bills.

357. Do you preserve the stationery for all the offices?—Not for all the offices, but for some of them.

358. For what offices of the House do you keep the stationery?—For the Committee-clerks, for some of the subordinate officers, and for my own office.

359. For the Journal-office?—No, they order stationery for themselves. We have also papers and books wanted for the table of the House: papers are ruled in particular forms, and we are obliged to order a number beforehand of things of that description. I do not mean to say that we want a large space, a moderately sized space will do for the purpose, but all this would abstract from the original size of the rooms.

360. How often do you renew that establishment of stationery?—It is ordered in continually, as I want it.

361. After each session of Parliament, excepting your books, do you make clearance of all the documents that you have been using during the session?—No, not completely; we retain all the drafts of public bills that have gone through the office.

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362. But those drafts could be put anywhere else, without any inconvenience, could they not?—Certainly.

363. And therefore a permanent provision should not be made for them?—No, and indeed I have kept them for only about five years.

364. Do you find any advantage in keeping them at all?—Sometimes they have been called for; I keep them, though, more in compliance with old custom.

365. You keep the drafts of the bill?—Yes, that which is sent to me in the first instance.

366. That is the only record there is of their existence?—Yes. There are also certain papers belonging to me as Clerk of the Fees, but they are not of any great size.

367. Those establishments of the four clerks and the three clerks are sufficient for all the different offices that you hold, are they not?—Yes; if the three writing-clerks were not sufficient, another must be called for, but that would be no additional expense, as they are only paid for what they copy.

Mr. *Charles Paskin*, called in; and Examined.

Mr. *C. Paskin.*

368. WHAT are you?—Deliverer of Votes and printed Papers to the Members.

369. How long have you held that office?—In October 1833 I was appointed.

370. But you were connected with that office before that time, were you not?—Yes, I was deputy for some years.

371. What accommodation had you in the old House of Commons?—Two rooms going out of the lobby, a warehouse underneath the late long gallery, and a room by Westminster-Hall, where the papers were collected overnight, ready to go out the next morning.

372. That makes an amount in toto of four rooms?—Yes.

373. Did you find that sufficient in number?—Yes; they were much too small, but the number of rooms was sufficient.

374. Did you find the accommodation sufficient?—No; the office itself was too small.

375. Was the adjoining room too small for the purposes?—Yes, it was; the store-room was also not sufficient, and the room for collecting papers was not large enough; it was very small.

376. But if your office and the adjoining rooms were larger, that would relieve the necessity of larger apartments elsewhere?—I think not, because the office close to the House is more for the accommodation of Members.

377. Should you say that the present room you occupy as the Vote-office is sufficiently large?—I should think it is, nearly.

378. Is it an object for the person in the Vote-office to have too large a room?—Not too large a room.

379. Would it not be possible, if it was too large, that it might be made a place for Members to come and talk in?—Yes, I should think so, and thereby impede business, when Members were there conversing.

380. That interruption would depend as well upon the situation of the office as the size?—Yes, but it must be near the House; and being so near the House, it would become a resort for Members if it were very large.

381. Would it be necessary that it should be so very near the door of the House as the former Vote-office was?—As near as possible, I should say; because for instance, the House going into Committee on any particular bill, bills are wanted by the Members immediately, and therefore it should be near to the House.

382. Would it not be desirable that the Vote-office should be as contiguous to the House as possible, but on the other hand should not incommode the passage to the House-door?—I should say, certainly; it ought to be something in the same situation as it is now, which is much more convenient than the late one, because strangers used to walk into that as a matter of course out of the lobby.

383. Was it not very inconvenient to Members going for books, and to yourself, that they were stopped in their progress by strangers?—Yes, the way into the House was very much interrupted by strangers standing at the door.

384. Then you would desire the Vote-office to be close to the House, but at the same time to be removed from that part of the House to which strangers have immediate access?—Yes.

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385. In the size of the room that you contemplate for the Vote-office, and adjoining room, you must make allowance for shelves, and so on?—Yes.

386. Would you say that double the size of the former Vote-office, and double the size of the adjoining room, would be sufficient?—Yes; and I would take the liberty of suggesting that they should be airy and light, there being attendance in the Vote-office from half-past 10 in the morning until the house rises.

387. Would that be too large?—I should say not.

388. And the same amount of warehouse-room as before?—Somewhat more.

389. Would it be of any consequence to have those two warehouse-rooms adjacent, or separated from the Vote-office?—I should say, they should not be adjacent to the Vote-office, because the inconvenience of the papers being brought to those warehouses would be great.

390. Then you would rather that these warehouse-rooms should be in such a situation that they could be of easy access to the persons bringing papers and other articles to stow there?—Yes.

391. That you would prefer to their being contiguous to the Vote-office?—Yes.

392. Have any recommendations of the Committee respecting the sale of Parliamentary papers been carried into effect?—Not that I am aware of.

393. If they were sold in the Vote-office, it would be necessary to have that Vote-office very accessible to the public, would it not?—Yes; but that arrangement would very much interfere with the business of the Vote-office.

394. In that case, should you contemplate that the outer warehouse should be the place where they should be sold, rather than the Vote-office itself?—Yes; because the office itself should be exclusively for the accommodation of the Members.

395. When occasionally papers are printed by order of His Majesty, are they sent to the Vote-office?—Yes.

William G. Rose, Esq., *Robert Chalmers*, Esq., and *George Whittam*, Esq., called in; and Examined.

W. G. Rose, Esq.
R. Chalmers, Esq.
G. Whittam, Esq.

396. (To Mr. *Rose.*) WHAT office do you hold?—I am principal Committee-clerk, and I am also Clerk of Recognizances.

397. What is your establishment as Clerk of the Recognizances?—My establishment as Clerk of Recognizances consists of a single room, which ought to be in a retired part of the House. I have a great many calculations, as Clerk to the Taxers of Costs, to make, especially in solicitors' bills; and the Speaker having to give a certificate upon the report that is made from the Examiners, requires a great deal of nicety on my part to take care that the figures correspond to the general amount in the report.

398. Should not your office also be one that is accessible to strangers without much difficulty?—Yes, I do not know one more so.

399. Is it a room that should be contiguous to the House?—It ought to be contiguous to the lobby.

400. But provided you are under the roof, it is of no importance whether it is next to the lobby or not?—No.

401. Have you any clerks?—I have no clerk on the establishment; I have a clerk who is paid by me.

402. Have you any private business?—Very little.

403. Do you require space for any papers to be deposited in your Recognizance-office?—I should require presses as a matter of course, because there are books and documents; and I also make memorandums of every thing that takes place, and keep minutes, which the Members may have access to at any time, and they are found very useful to Members of Parliament and to persons petitioning.

404. Are the papers belonging to the office, papers of the session?—For the whole Parliament; it is impossible for me to say at what period a petition may be presented.

405. Then you may have papers for three or four or five years?—Yes; I also keep taxed bills there, and the whole proceedings that have taken place upon them.

406. What amount of warehouse-room do you require?—Very small; a couple of presses would be sufficient, with two desks and drawers.

407. Should you want any other room besides your own room for parties to be

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waiting in?—No; because I have frequently found when there are more rooms than one, that parties cannot be found when they are wanted.

408. With regard to the Committee-clerks' office, can you give the Committee any evidence as to the amount of accommodation which they ought to have?—The old Committee-clerks' office I think was nearly 30 feet long and about 13 feet wide, exclusive of the presses; this was a great deal too narrow; I think it was about eight feet in height. As there are frequently a great number of persons in that office besides the clerks, it makes the office very unhealthy and very hot by being so low; I therefore should propose that the new office should be made 36 feet long, that it should be made 18 feet wide, clear of the presses; and I should also propose that there should be four double desks, with drawers on each side of them, for the Committee-clerk and his assistant. I should also propose that there should be a suspended lamp over each desk, because then one lamp would light each side of the desk, and the principal Committee-clerk would have easy communication with his assistant, I should also propose that there should be four large presses, one for each Committee-clerk to keep his sessional papers in. I should also propose that there should be one large press for the Journals, and one large press for the local and personal Acts, that they may not be mixed together; and that a room be attached fitted-up with presses, for the purpose of keeping the committee papers of all descriptions, and that a schedule be kept of such sessional papers. The only other thing that I have to propose is, that a large table should be placed in the centre of the office, for the purpose of examining plans and other papers. Two drawers might be placed in that table, at which I could sit; this would be all the accommodation I should require. I think if the height of the room was to be 12 or 13 feet, instead of eight, it would be quite sufficient, and add greatly to the comfort of the clerks.

409. That would make two rooms altogether?—Yes; the second room I think ought not to be of that height, because it is merely to deposit papers in. I was asked a question as to the Recognizance-office; my answer to that question will equally apply to the Committee-clerks' office; that is, with respect to the distance from the House. I think, and Mr. Chalmers and Mr. Whittam agree with me, that if it was midway between the House and committee-rooms, it would be very desirable for Members of Parliament and for the clerks.

410. Should it not be also very accessible to strangers?—Yes, it should, most assuredly.

411. Independently of the access which Members might have to it from the House?—Yes.

412. Would it be convenient that there should be an outer room for strangers, independently of the office?—I think not, and my reason is this: very often we have papers of great consequence entrusted to our care in our office, plans, books of reference, subscription lists and so on, and if a person got them out of the office he might alter them; but there being so many clerks in the office, the eye of one or the other would be upon him when he was inspecting the documents, and we should detect a person doing anything of that kind.

413. Therefore you think that, so far from that expediting public business, it would interfere with its being transacted in a correct manner?—Yes.

414. Would it not be desirable that there should be desks for strangers, at which they might correct their evidence?—A table in the extra room where the presses are would answer every purpose of that kind.

415. During the recess of Parliament, is the Committee-clerks' office open?—There is no duty done in that office during the recess of Parliament.

416. Is there much work at night?—Sometimes a great deal of work at night; I may say that they are up at times two and three nights successively in copying minutes.

417. That being the case, must there not be some attention paid to well lighting and well warming the room?—Yes, and that was my reason for suggesting the size of the room and its height; two fire-places ought to be placed in it, one at each end, or as near to each end as they could conveniently be placed, sufficiently to warm the office.

418. (To Mr. *Chalmers*.) Have you anything to add to what Mr. Rose has stated?—I entirely concur in what Mr. Rose has said.

419. (To Mr. *Whittam*.) Do you concur in opinion?—I do.

420. Have you anything to add?—I have not.

Thomas Dyson, Esq., called in; and Examined.

T. Dyson, Esq.

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421. WHAT is your situation?—I am Clerk of Elections.

422. What is your establishment?—I have an assistant and two clerks.

423. What accommodation had you in the old House?—I had two rooms.

424. Were they sufficient?—Not in point of size; they were very small rooms.

425. Have you any private business?—Yes.

426. Are the clerks engaged in public or in private business?—They are engaged in both.

427. Do you contemplate any increase or diminution in the number of clerks?—No.

428. If you were to state the size of the rooms which you wished to have, what would be the dimensions of them?—I do not require very large rooms, but those that I had in the old House were very small.

429. Do you require presses in the rooms?—Yes.

430. What description of books or papers are you obliged to keep?—All the minutes of Election Committees.

431. From year to year?—They are always kept there for ever.

432. Then a large warehouse for the preservation of election minutes would be necessary?—No, a large press in my office will be sufficient; this year there will be a great many minutes very probably which must be kept.

433. Do you keep the petitions for Election Committees?—No, I do not; only the minutes.

434. What amount of space ought you to calculate that they would occupy in ordinary years?—I have about eight or nine volumes at the opening of every Parliament, all in manuscript; then I am obliged to keep a set of the Journals, which take up a good deal of room necessarily.

435. Your room should be contiguous to the Election Committee-rooms, should it not?—I do not think that that signifies so much.

436. Would it not be a convenience?—It would be more convenient.

437. Is yours an office that ought to have easy access for the public?—Yes, certainly.

438. Independently of the communication with the House?—Certainly.

439. Is it not important that it should be very near the door of the House?—No.

440. Under the same roof; but otherwise it is of no importance where it is situated, as far as the House is concerned?—No.

441. From Parliament to Parliament the proceedings of the Election Committees are continually deposited in your office?—Yes.

442. For what series of years had you the proceedings of Election Committees, before the fire?—From the year 1770; the earliest proceedings under the Grenville Act.

443. What bulk of paper had you?—I had two moderate sized presses; I think every new Parliament would produce seven or eight large volumes of evidence.

444. Is it considered that every Member of the House, if he requires it, may have access to those documents?—Yes.

445. Therefore it is necessary that they should be of easy access to Members?—Yes.

446. Are they all destroyed?—Yes, every paper.

Mr. *Samuel Gunnell*, called in; and Examined.

Mr. *S. Gunnell.*

447. WHAT office do you hold?—I am Chief-clerk in the Ingrossing-office.

448. What is the establishment in that office?—There were four clerks, but at present only two besides myself.

449. Do you do any private business?—I have never had the opportunity.

450. Is the establishment of clerks sufficient, or do you think it is likely to require an increase?—It has been that number some years; whether it will be increased I cannot say.

451. Are you sufficiently employed, or overworked, with the present number?—We have a sufficient number of clerks.

452. Then you do not contemplate any increase of establishment?—No.

453. Or diminution?—Not that I am aware of.

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454. Do you ever require extra assistance?—The nature of our work is such that we are obliged to employ stationers occasionally to save time.

455. Is that duty done out of the House, or in the House?—Out of the House; the duty could not well be done in the House.

456. Even if you had the accommodation?—No.

457. Then you require accommodation for yourself and three other persons?—Yes.

458. What were your apartments in the old House?—Two rooms; one large room for the office, and a smaller room for the accommodation of the person employed to stitch the parchments together.

459. Were those rooms sufficient?—Yes, we have always found them so.

460. In size?—It would have been more convenient if the small room had been larger.

461. Was the larger room of the two large enough?—Yes, we have always found it so.

462. Do you require a good light?—Yes, very good light.

463. Then you would say that the same sized large room would do, but a larger space for the other room would be necessary?—Yes, but the rooms were formerly very dark.

464. Do you require any warehouse-room of any sort?—No; we had closets within our office for putting away parchments.

465. The same amount of closet-room would do as you had formerly?—Yes; we do not require any great amount of press-room.

466. Should the office be near the House?—Yes; in case of adding clauses on third readings, and for the convenience of Members bringing bills to the office.

467. If it were not possible to have the whole of your establishment close to the office, must you have a subsidiary office very close?—Yes, because the bill may be wanted quickly, and much time would be lost were the room at a distance from our office; so that we should have that person employed in stitching as near to us as possible.

Edward Johnson, Esq. called in; and Examined.

E. Johnson, Esq.

468. WHAT is your situation?—The Principal-clerk in the Private-Bill office.

469. What is your establishment?—Three clerks, besides myself.

470. Do you consider that that is sufficient for the transaction of your business?—Yes.

471. There is no increase or diminution to be expected in your establishment?—No.

472. Are you ever called upon to employ occasional assistants?—No, except sometimes at the end of the session, when the ingrossed bills are examined, we have an extra clerk, whom we can get without any expense to the public by paying him ourselves, to read with us; we do not want any other assistant upon the establishment.

473. Do you transact private business?—No, we were prohibited from doing so on the first establishment of the office.

474. What was the amount of accommodation you had in the old House?—Three rooms, one large room and two smaller ones.

475. Was that sufficient?—Three rooms are quite sufficient, and we cannot do with less.

476. Were those rooms of sufficient size for your accommodation?—Hardly, the back rooms were not, they were inconvenient; the large room was a very good one, quite large enough.

477. But the other rooms must be larger than the former rooms were?—Yes.

478. If strangers come to examine plans attached to private bills, is a room necessary for them in which to examine those plans?—Yes, it is necessary to have a room for depositing them, and that room ought to be sufficiently large to examine them in also, with a large table.

479. Would it not be in the large room that they would examine the plans?—No; I propose that the room where the plans are deposited should be large enough for examining them, instead of bringing them into the other office where all the business is transacted.

480. Would the room in which plans were deposited be one of the two smaller rooms?—Yes.

481. If you require space for examining the plans, that room must not be very small, must it?—No. *E. Johnson*, Esq.

482. And the table must not be very small?—No, it must not. The other of the two rooms is for a desk for myself, where I have to perform my various duties. 13 March 1835.

483. You think that those rooms should be so situated as to be easily accessible to the public?—Yes, they ought to be.

484. Is it of any great object their being very near the door of the House?—That will depend upon the accommodation to Members; for strangers it does not signify. It ought to be tolerably near the House, because we have in the different stages of the bills to carry them from the table of the House to our office, and to carry them back upon the second reading, and carry the rolls also, and which are wanted in a great hurry at four o'clock, and just at that time the Members are waiting for them.

485. They need not be more accessible than they were formerly?—No; at a reasonable distance; they ought to be somewhat near the House.

486. Is not light very essential for your office?—Yes; there are a great many persons coming in for business.

John Rickman, Esq., called in; and Examined.

487. DID you formerly hold the office of Secretary to Lord Colchester, when Speaker?—I did. *J. Rickman*, Esq.

488. In your opinion, what accommodation will be necessary for the Speaker's Secretary to have, in point of number of rooms?—I think the Speaker's Secretary can have no occasion at any time for more than two persons to assist him; and therefore a room for three persons, with desks and drawers, would be quite sufficient.

489. Should he have a room also for persons waiting to transact business with him?—I never felt any necessity of that kind.

490. Do you think that it would be desirable that he should have one room or two rooms?—It might be rather more convenient to have two small rooms than one large room.

491. With regard to the fittings up, ought there to be bookcases or any other fittings?—The fittings up in the shape of low closets were always very convenient, and the tables at which the Secretary and an occasional assistant sat and wrote had ample drawers; there needs nothing more than that.

492. Were there many papers belonging to the Speaker's Secretary, which he was obliged to preserve?—Very few.

493. Were there any papers that he was obliged to keep from session to session?—I do not recollect any, except election petition recognizances, and this because it was impossible to know when they might be estreated; but I never purposely kept any other papers.

494. Would the recognizances require to be kept beyond the duration of one Parliament?—No; and the accumulation of recognizances is never more than a large bundle of papers a foot high.

495. Then there would be very little necessity for chests or drawers, or anything of that kind, on a large scale?—No occasion at all.

496. Would he require a copy of the Journals?—Not at all; it is far more convenient to go to the Journal-office or the library of the House for them.

497. Did you perform the duties of Secretary in person?—Yes, during four general election years.

498. Did you find two assistants necessary?—Yes; and I believe that now, from the new practice of immediately printing the votes, one is sufficient; because, before the new system of votes was introduced, the Speaker's Secretary was obliged to serve full copies of election petitions on each of the parties, which produced a great mass of copying labour; at present the petition is referred to in a short notice, with a printed copy annexed.

499. The great press of business occurs at the beginning of a new Parliament, while election petitions are pending?—Yes.

500. And at other times the duty is comparatively light?—The labour is light; the duty consists in regular attendance on the Speaker, and in being his instrument for all services, as occasion may require. All official documents signed by the Speaker, are prepared by his Secretary.

J. Rickman, Esq.

13 March 1835.

501. As to the situation of the Speaker's Secretary's room, ought it to be near the House of Commons, or near the Speaker's house?—He being the connecting link of intercourse between the Members of the House of Commons and the Speaker, I think his office should be placed accordingly.

502. Is it desirable that the public should have easy access to him?—Those persons who seek the Speaker's Secretary will always find him; they are agents who come on business.

503. Are there many strangers that have business with the Speaker's Secretary?—All applications that come to the Speaker are made through the Secretary, and sometimes there is a pressure of persons applying for admission to a debate; but that appears to me to be the only case in which many strangers apply to the Speaker's Secretary.

504. There should be easy access for strangers to the Secretary's room, should there not?—Yes; and if the room adjoins the lobby, it becomes a convenient place for Members and other persons to resort to during debate in the House; the Speaker's Secretary seldom being there at that time.

505. There should be a dressing-room also for the Chaplain, should there not?—If there were three small rooms, one would serve exclusively for the dressing-room of the Chaplain.

506. The dressing of the Chaplain is simply putting on his gown and cassock, and taking it off?—Yes.

507. And that at such time of the day, that he need never be here after four o'clock?—At the time of the meeting of the House; but it may be more convenient to him and more decorous that he should have a place for dressing, and where to leave his umbrella and hat; a place 12 feet square would serve the purpose.

508. Do you think it is necessary, for the conduct of the business of the House generally, that the Chief-clerk should have an official residence under the roof of the House; by residence, meaning not merely an apartment where occasionally he might sleep as well as dress, but also an habitual place of residence with his family?—I think it expedient that the First-clerk should have a residence as near as possible to the House, that he may be at hand for reference from any of the officers, who may sometimes be employed at all times of the day and night.

509. Do not you conceive that there is some inconvenience in point of settling the exact size of that house, in preventing its being either too large or too small?—I do not think that I am competent to answer that question.

510. As it is intended that the salary of the Clerk should be reduced, do you therefore conceive that the same sort of sized house as heretofore would be either large enough, or too large; looking at his position in life, and with regard to the lower amount of salary?—The former house was not extremely large; but it was so different in its arrangement from a modern house, that I cannot give an opinion.

511. Are there any other reasons, besides facility of reference, which induce you to suppose that it would be necessary to have an official residence for the Chief-clerk?—No; that is the only reason that occurs to me.

512. Would it be necessary that the official residence should be nearer the House than the beginning of Abingdon-street, for instance?—No; I think if it were within three minutes' walk, or any such distance as is now described, the purpose which I speak of would be answered.

513. Therefore you conceive that if the Chief-clerk of the House were in the vicinity of the House of Commons, that would answer all purposes, without his being under the roof?—Certainly.

514. Have you any observations that you wish to offer?—Not any.

APPENDIX.

— No. 1. —

HOUSE OF COMMONS OFFICES, BURNT DOWN.				HOUSE OF COMMONS OFFICES; PROPOSED ACCOMMODATION.		
OFFICES; PARTICULARS OF.	THE APARTMENTS WERE,	SIZE.		APARTMENTS REQUIRED.	SIZE in Feet by Feet.	Square Feet.
		Ft. In.	Ft. In.			
Clerk of the Fees:						
John Edward Dorington, esq.	an office - principal story	16 3	by 14 0	an office - - - -	16 by 16	
	ditto - - - ditto -	14 9	by 12 4	ditto - - - -	24 by 18	
	ditto - two-pair story	16 4	by 9 4	ditto - - - -	18 by 14	
	ditto - - - ditto -	15 6	by 12 0	ditto - - - -	18 by 14	
				a messenger's room - -	6 by 6	
Clerk of the Journals:						
John Bull, esq.	an office - two-pair story	22 0	by 20 6	an office - - - -	24 by 20	
	ditto - attic story -	18 2	by 11 10	ditto - - - -	16 by 14	
	ditto - - ditto -	16 10	by 13 4	ditto - - - -	18 by 16	
	store-room mezz^{e} story -	12 6	by 12 6	ditto - - - -	16 by 16	
				Store-rooms: About 250 feet cube of presses required for each Session.		
Committee Clerks:						
W. G. Rose, esq. - R. Chalmers, esq. G. Whittam, esq.	an office - principal story	26 2	by 20 10	an office - - - -	39 by 21	
	ditto - two-pair story	17 11	by 12 0	a room for witnesses -	18 by 18	
Clerk of Ingrossments:						
Mr. S. Gunnell -	an office - at floor of the Long Gallery.	26 2	by 20 10	an office - - - -	26 by 21	
				ditto - - - -	15 by 12	
Clerk of Elections:						
T. Dyson, esq. -	an office - two-pair story	13 5	by 10 8	an office - - - -	23 by 16	
	ditto - - - ditto -	22 4	by 13 5	ditto - - - -	28 by 20	
Private Bill Office:						
E. Johnson, esq.	an office - two-pair story	24 4	by 18 3	an office - - - -	22 by 18	
	ditto - - - ditto -	10 11	by 10 6	ditto - - - -	18 by 16	
	ditto - - - ditto -	10 11	by 9 0	ditto - - - -	14 by 14	
Clerk of Recognizances:						
W. G. Rose, esq. -	an office - two-pair story	14 0	by 13 9	an office - - - -	18 by 18	
Vote Office:						
Mr. C. Paskin -	an office - principal story	14 11	by 11 3	an office - - - -	16 by 11	
	ditto - - - ditto -	12 0	by 10 0	ditto - - - -	16 by 14	
	ditto - - - ditto -	14 0	by 10 0	store-rooms - - -	80 by 20	
	store - - - - ditto -	20 3	by 6 6	room for collating papers -	30 by 20	
	ditto - ground-story under Long Gallery -	18 0	by 10 0			
		18 0	by 10 0			
		18 0	by 10 0			
		18 0	by 10 0			
		18 0	by 10 0			
Secretary to the Speaker:						
E. Romilly, esq. -	a room - principal story	21 6	by 10 9	a room - - - -	18 by 14	
	ditto over other part ditto	20 6	by 10 9*	ditto for strangers waiting	18 by 14	
	ditto of cloisters - ditto	10 9	by 10 0*	- - a room for Masters in Chancery, Sheriffs of London, &c.†	18 by 18	
Chaplain - - -	a room - principal story	11 4	by 5 3	a dressing-room - -	16 by 9	
Retiring Room for the Speaker.	a room - two-pair story	15 0	by 14 2	a room - - - -	18 by 18	

* Doubtful how applied.

† Not indispensable.

HOUSE OF COMMONS OFFICES, BURNT DOWN.			HOUSE OF COMMONS OFFICES; PROPOSED ACCOMMODATION.		
OFFICES; PARTICULARS OF.	THE APARTMENTS WERE,	SIZE.	APARTMENTS REQUIRED.	SIZE in Feet by Feet.	Square Feet.
		Ft. In. Ft. In.			
Serjeant-at-Arms Department: Henry Seymour, esq.	a room - attic story -	18 0 by 17 0	a prison room - - -	14 by 14	
	ditto - - ditto - -	16 8 by 10 8	ditto - - - -	14 by 14	
	ditto - - ditto - -	14 2 by 10 6	- - a waiting-room for messengers.	12 by 8	
	ditto - mezz^{e} story -	13 4 by 10 6	- - a dressing-room for serjeant.	13 by 11	
	ditto - - ditto - -	10 9 by 10 2	ditto - - for his deputy	13 by 11	
Deputy Housekeeper: Mr. John Bellamy	a room - attic story -	25 0 by 18 0	*a sitting-room - - -	25 by 18	
	ditto - - ditto - -	7 1 by 7 0	ditto - - - -	18 by 18	
	ditto - - ditto - -	13 8 by 10 10	a bed-room - - -	16 by 14	
	ditto - - ditto - -	14 0 by 12 3	ditto - - - -	16 by 14	
	ditto - - ditto - -	14 0 by 13 7	a servant's bed-room - -	18 by 18	
	ditto - - ditto - -	14 0 by 8 2	ditto - - - -	18 by 18	
	a passage-room, ditto -	23 3 by 12 0	ditto - - - -	14 by 12	
	ditto - - ditto - -	27 0 by 12 0	ditto - - - -	14 by 12	
	closets in No. 4, ditto -	44 10 by 5 6	- - a store-room for mops, brooms, mats, coal-scuttles, &c.	10 by 10	
	closet - - ditto - -	6 4 by 3 6			
	a store-room, two-pair story	20 3 by 14 7	- - a private kitchen -	14 by 14	
			ditto scullery - -	10 by 8	
			ditto larder and pantry -	10 by 8	
Ditto, as to Accommodation for Members.	a tea-room - two-pair story	20 3 by 9 0	†a tea-room - - -	20 by 18	
	a dining-room - ditto -	26 0 by 24 8	a dining-room - - -	36 by 20	
	a kitchen and refreshment-room - ditto -	28 8 by 21 6	a kitchen - - - -	28 by 20	
			a scullery - - - -	12 by 12	
			a larder and pantry - -	12 by 12	
	a scullery - - ditto -	22 0 by 7 2	a bar - - - -	12 by 10	
	lobby - - - - ditto -	26 0 by 10 1	cellars for wine and beer -	56 by 10	
	cellars - under lobby to the House of Lords - -	14 0 by 10 0	ditto for coals - -	18 by 10	
		14 0 by 10 0	ditto for wood - -	14 by 10	
		14 0 by 7 6			
		14 0 by 7 6			
	cellars for coals - under the Members' waiting-rooms - -	26 0 by 26 0			
		22 0 by 22 0			
Post-Office - -	an office - principal story	7 0 by 7 0	- - a room; to be used also by the Deputy Housekeeper and Receiver of Serjeant's fees, and for store of stationery.	20 by 15	
	ditto - two-pair story	11 0 by 6 6	- - an office - - -	8 by 8	
Day & Night Watchmen:	- - the next-mentioned room was likewise used for the watchmen.	- - -	a room - - - -	8 by 8	
Servants of Members:	a room - principal story	19 0 by 12 3	a room - - - -	19 by 12	
Rooms for Members waiting for carriages, and to leave their great-coats, &c.	a room - ground story -	30 0 by 27 0	a room - - - -	30 by 27	
	ditto - - ditto - -	24 6 by 24 5	ditto - - - -	25 by 24	
	closet - principal story	15 0 by 4 6	ditto - - - -	6 by 6	
Messengers - -	- - - - - - -	- - -	- - a room to make up their books and papers.	12 by 10	
Door-keepers - -	office - - principal story	8 0 by 5 6	- - a room for upper door-keeper.	12 by 10	
			ditto for lower - ditto	8 by 8	
Library - - -	a room - principal story	55 5 by 23 4	‡a room } - - - {	60 by 28	
	ditto, door-keeper - ditto	8 0 by 7 0	ditto }	60 by 28	
	ditto - two-pair story	30 0 by 22 5	ditto - - - -	60 by 28	
	ditto - - ditto - -	25 4 by 23 0			
Thomas Vardon, esq.	- - - - - -	- - -	- - four rooms in the story over the above-mentioned should be provided for the accommodation of the Librarian.		

* A smaller sized room would be sufficient.
† This may be larger.
‡ These two rooms to be contiguous, and a small Messengers' lobby to intervene between these rooms and the third room.

— No. 2. —

LETTER from *E. Tyrrell*, Esq., City Remembrancer, to the Right Honourable Lord *Granville Somerset*.

Remembrancer's Office, Guildhall,
1 June 1835.

My Lord,

I AM directed by the Navigation Committee of the Corporation of London to communicate to your Lordship, as Chairman of the Select Committee of the Honourable the House of Commons, appointed, "to consider and report upon such Plan as may be most fitting and convenient for the permanent Accommodation of the Houses of Parliament," that they are willing to grant permission to the Commissioners of His Majesty's Woods and Forests to embank part of the river Thames contiguous to Palace Yard and the Houses of Lords and Commons, for the purpose of building new Houses of Parliament; the front line of the embankment to be drawn from the northern face of the third pier (from the northern abutment) of Westminster Bridge to the face of the outer pile of or at Pope's Wharf, being 88 feet 10 inches from the wharf wall of Messrs. Pope; the lower or eastern end of the said embankment to be rounded with a sweep from a point at 200 feet from the upper side of the causeway belonging or attached to the wooden bridge at Palace Yard; and the said sweep to be continued down to the angle of the present embankment on the upper side of the said stairs, off the wooden bridge; the upper or western end of the said new embankment to be finished at the angle with a quarter of a circle; provided that, in order to render the said embankment uniform and beneficial to the river, the Parliament Houses and the public, power be given in the Act to the Corporation of London to allow parties desirous of making projections at their wharfs or other premises into the river, to continue the embankment in a straight line, and not otherwise, towards the outer angle of Grosvenor wharf, upon such terms as may be agreed to between the parties desirous of projecting and the Corporation of London; the sums received in consideration for the said embankments to be applied to the improvement of the navigation of the river Thames; His Majesty's Commissioners of Woods and Forests undertaking in the said Act to remove any accumulation of mud, sand and dirt caused by the said embankment, and to take all the ballast required to fill up the said embankment from the bed of the river in such situations as shall be pointed out by the proper officers of the Corporation as most beneficial to the navigation of the river.

I have the honour to be,
My Lord,
Your Lordship's faithful and obedient Servant,

E. Tyrrell,
City Remembrancer.

REPORT

FROM THE

SELECT COMMITTEE

ON

REBUILDING HOUSES OF PARLIAMEN

WITH THE

MINUTES OF EVIDENCE,

AND AN APPENDIX.

Ordered, by The House of Commons, *to be Printed,*
3 *June* 1835.

262.

REPORT

FROM THE

SELECT COMMITTEE

ON THE

ADMISSION OF LADIES

TO THE

STRANGERS' GALLERY;

TOGETHER WITH THE

MINUTES OF EVIDENCE

TAKEN BEFORE THEM.

Ordered, by The House of Commons, *to be Printed,*
28 *July* 1835.

437.

Jovis, 16° die Julii, 1835.

Ordered, That a Select Committee be appointed to consider and report upon the best means of setting apart and adapting a portion of the Strangers' Gallery for the admittance of Ladies during the Debates of This House; such admittance to be granted or regulated according to such form and manner as The Speaker shall appoint: also, to consider of directions proper to be given, with a view to the same effect, in the building of the New House of Commons.

And a Committee was appointed of,—

Mr. Grantley Berkeley.	Mr. Hanbury Tracy.
Major Fancourt.	Mr. Ormsby Gore.
Lord Norreys.	Sir Rufane Donkin.
Mr. Parrot.	Mr. O'Connell.
Major Beauclerk.	Mr. Bruen.
The Marquis of Chandos.	Mr. Bernal.
Mr. Hume.	Sir John Elley.
Captain Chetwynd.	Lord Viscount Milton.
Mr. Ewart.	Lord Ossulston.
Captain Craven Berkeley.	Mr. Bonham Carter.
Mr. Bagshawe.	Mr. Cowper.
The Marquis of Worcester.	Captain Frederick Berkeley.
Mr. Eaton.	Mr. Pechell.
Captain Polhill.	Mr. Pryme.
Mr. Charles Buller.	Mr. Pease.
Mr. Forester.	

Ordered, That the said Committee have power to send for Persons, Papers and Records.

Ordered, That Five be the Quorum of the Committee.

Veneris, 17° die Julii, 1835.

Ordered, That Lord Viscount Milton be excused from attendance on the Committee:—and that Mr. Perronet Thompson be added to the Committee.

Veneris, 24° die Julii, 1835.

Ordered, That the Committee have power to report their opinion, together with the Minutes of the Evidence taken before them.

THE REPORT - - - - - - - - - p. 3
MINUTES OF EVIDENCE - - - - - - - - p. 5

REPORT.

THE SELECT COMMITTEE appointed to consider and report upon the best means of setting apart and adapting a portion of the STRANGERS' GALLERY for the admittance of LADIES during the Debates of The House; such Admittance to be granted or regulated according to such form and manner as The Speaker shall appoint: also, to consider of directions proper to be given, with a view to the same effect, in the building of the New House of Commons; and who were empowered to report their opinion thereupon, together with the MINUTES of the EVIDENCE taken before them;——HAVE examined the matters to them referred, and have agreed to the following RESOLUTIONS:

Resolved,

THAT a portion of the Strangers' Gallery at the North end of the House, not exceeding a quarter of the whole, and capable of containing 24 ladies, be set apart for their accommodation, divided by a partition from the rest of the Gallery, and screened in front by an open trellis work.

THAT the Plan and Estimate submitted to the Committee by Sir Robert Smirke be adopted.

THAT a book should be kept in the custody of some person appointed by the Serjeant-at-Arms, in a place made for that purpose at the door of the entrance of the proposed Gallery.

THAT no Member be allowed to introduce more than two Ladies in the course of one week, unless the Gallery should not be fully occupied, as specified hereafter.

THAT the names of the Ladies be written down in the said book on the day previous to their admission, or, in the event of the adjournment of the House, on the last day of sitting previous to its next meeting; and that the signature of the Member be attached to the names of the Ladies so written down by him, and that he do state whether he proposed that they should be admitted at the morning or afternoon sitting.

THAT two printed Tickets be issued to each Member so entitled, which Tickets are to be presented by the Ladies at the door of the Gallery, without which they cannot be admitted, and that such Tickets shall not be transferable.

That, in case it should happen that the said Gallery should not be fully occupied within one hour after the meeting of the House, any Member may, on writing down the names, and receiving the Tickets as aforesaid, introduce two Ladies during the Sitting of the House, until the Gallery shall be full.

That the said book be kept open for the entry of names for admission on the following day, from half-past 11 o'clock in the morning till three o'clock in the afternoon; and that the same shall not be re-opened, unless the Gallery shall not be filled at the hour specified in the foregoing Resolution.

That the Gallery so proposed to be set apart, be called the Ladies' Gallery, and be kept exclusively for their accommodation.

That the alterations necessary in order to provide for the accommodation herein contemplated in the Strangers' Gallery, be proceeded with without delay, in order that the same may be completed for the reception of Ladies previously to the commencement of the next Session of Parliament.

That, in the new House of Commons, a Gallery should be constructed capable of accommodating not less than 40 Ladies.

28 *July* 1835.

LIST OF WITNESSES.

Martis, 21° die Julii, 1835.

Mr. Walter Henry Watts - - - - - - - - p. 5

Sir Robert Smirke - - - - - - - - - - p. 6

Veneris, 24° die Julii, 1835.

Mr. John Bellamy - - - - - - - - - - p. 7

MINUTES OF EVIDENCE.

Martis, 21° *die Julii*, 1835.

THE HON. G. C. GRANTLEY BERKELEY, IN THE CHAIR.

Sir Robert Smirke and Mr. *Walter Henry Watts*, called in, and Examined;

Sir *Robert Smirke* and Mr. *W. H. Watts*.

21 July 1835.

1. [*To Mr. Watts.*]—FOR what paper are you Reporter?—The Morning Chronicle.

2. Do Reporters generally find fault with their present gallery?—Not upon the whole; there are inconveniences.

3. What are the inconveniences?—The inconveniences are, a difficulty at times of hearing, owing to several circumstances; the elevation of the gallery several feet higher than the side galleries of the House; then the intervention of The Speaker's chair is a great inconvenience, inasmuch as it prevents those in front and on the right side from seeing the left side of the House, and those in front and the left side from seeing the right side of the House. When an honourable Member rises, it is frequently, therefore, difficult to know who it is for some time; and the distance likewise is an inconvenience. But there are conveniences also; one is, that we have a gallery to ourselves, without interruption from the intrusion of strangers; another convenience is, that we have access to the gallery at our own pleasure.

4. Do you mean to say that the present gallery is too high?—If it were lower, I think we should hear better.

5. Do you think that there would be an advantage if a balcony were thrown out in front of the Reporters' Gallery, so as to bring the reporters nearer The Speaker's chair?—Yes, I think that would be an advantage. If the gallery were lowered, it would be an increase of that advantage, otherwise it would not be so great an advantage as regards our hearing of Members who sit near The Speaker's chair.

6. The balcony must be on a level with the lower seat of the present gallery; would there be much inconvenience in having those two rows of reporters on the same level?—Not the slightest, that I am aware of.

7. If there were two more rows of seats descending in the same line, would your situation be better or worse?—If the seats descended, I fear that The Speaker's chair would be a great obstacle.

8. Is The Speaker's chair very inconveniently elevated for the Reporter's Gallery?—Yes, I think it is. I do not know whether it could be lowered with propriety or advantage, but it is a great obstacle now, both to sight and to hearing.

9. [*To Sir R. Smirke.*]—Do you think that you could lower The Speaker's chair?—I considered The Speaker's chair as a matter of ancient form and usage, and I made it in the same form as before, and it was desired that I should make it of such materials that it might go into any future building, if desired; but it is of different construction from the rest of the work.

10. Would the lowering of The Speaker's chair affect the sound of his voice?—No; there would be no objection to its being lowered a little; it would make it necessary to be altogether new. The chair itself is an ancient pattern.

11. [*To Mr. Watts.*]—If you had two rows of benches on the same level, would not one interfere with the other?—Not materially; the front row is occupied by those reporters who are engaged on duty; the other by their immediate successors, who wish to comprehend the course of proceedings before they commence writing.

12. Do you hear better or worse than you did in the old House?—About the same, I think. We are, in some respects, much better off.

13. Do

Sir *Robert Smirke* and Mr. *W. H. Watts.*

21 July 1835.

13. Do you require a retiring room?—Yes; it is indispensable: for divisions for instance.

Sir R. Smirke.—There might be this objection to bringing the balcony forward, that the nearer you approach to the chair, the larger space that chair fills in the view, and will to a certain degree obstruct a larger portion of the view of the House; that would not be materially affected, if the additional seats were upon the same level; then you would rather look over it.

14. (*To Mr. Watts.*)—Do you think the information you have given to the Committee amounts to a general feeling of the reporters?—I am not deputed or authorised by them to state this; I attend as an individual, but I have no doubt in my mind it does.

15. What in your opinion should be the form of the new gallery described, in front of the present one; would you have it square, or a half circle?—I rather think a square would be the better form.

16. (*To Sir R. Smirke.*)—Does it appear to you, that the best plan will be to apportion one side of the Strangers' Gallery to ladies?—Yes.

17. That will be attended with the least trouble and expense?—It will; the quarter of the Gallery of the House of Lords held about 25, which was set apart for ladies.

18. What would a quarter of this gallery hold?—I should think this gallery must hold 150 altogether, if crowded; a quarter of the space would hold about 24, who would see well; the pillars would occupy a certain space.

19. You propose taking away the seat from the Members' Gallery that immediately would adjoin the ladies?—A portion of it.

20. If the end of the Members' Gallery were interfered with, would not that interfere with the staircase?—Yes; they must have a staircase on the west side of the House.

21. And there would be more room than in the old ventilator for the ladies?—Yes; and they could not see at all there.

22. And would there be a good room for retiring?—Yes, plenty of it.

23. Would they have a separate staircase?—Yes.

24. How many benches would there be?—Four.

25. Is the retiring room large enough to be divided between the ladies and the public?—Quite.

26. What would be the probable cost of that arrangement?—The Committee will allow me till to-morrow to consider of that; it is certainly the least expensive plan that has been mentioned.

27. Would you take up the partition as high as the roof?—No, only about 10 feet.

28. How many feet would you leave between the Ladies' Gallery and the Members' Gallery?—About five or six feet.

29. That would prevent all talking?—It would prevent conversation.

30. About what time would you be able to furnish the Committee with a plan and estimate of the expense?—By Thursday morning.

ESTIMATE, &c. of the proposed LADIES' GALLERY; delivered in by Sir *Robert Smirke*; with a Plan.

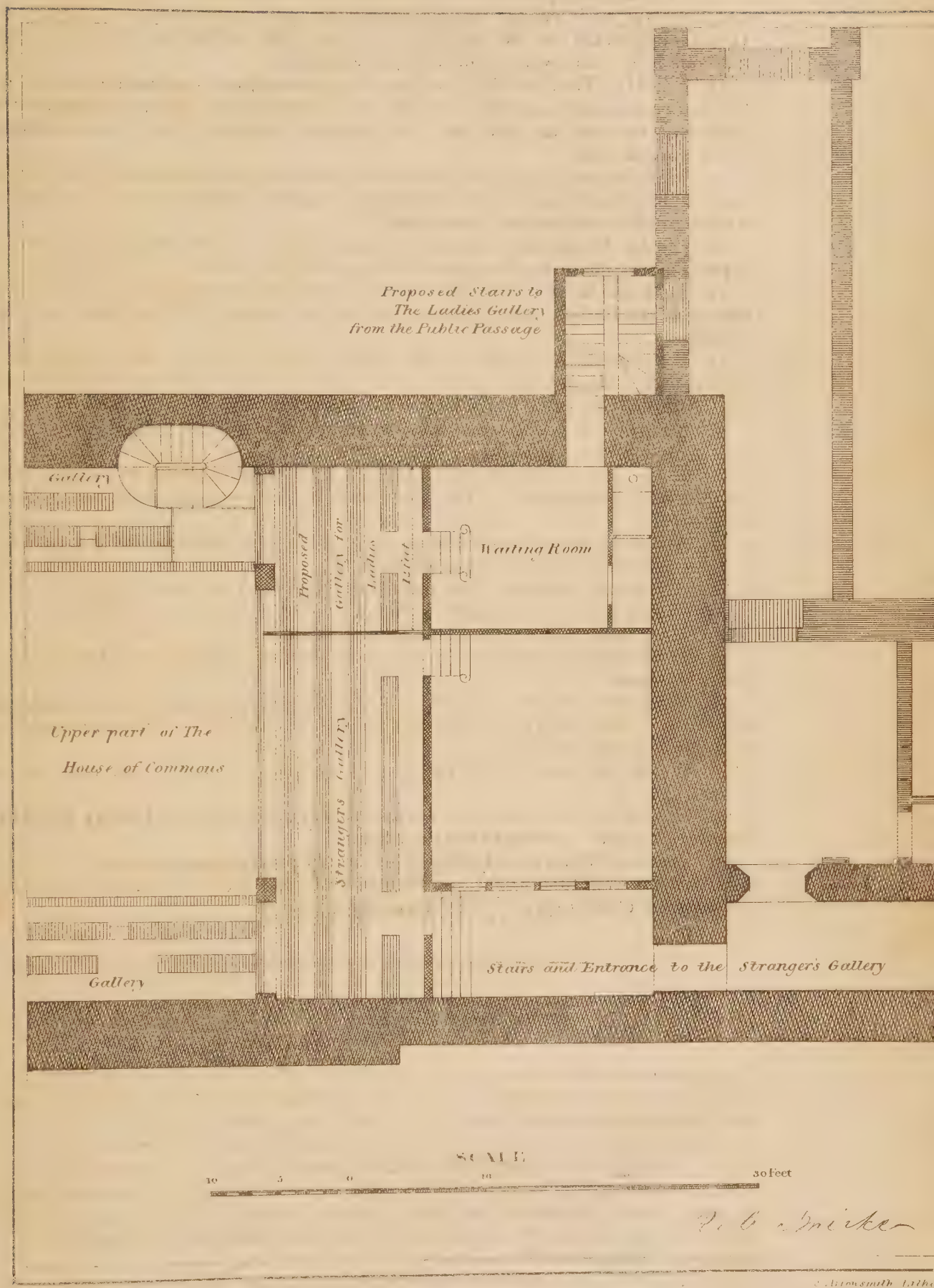
ACCORDING to the arrangement proposed for allotting a part of the Strangers' Gallery for the accommodation of Ladies, it will be necessary to build a staircase at the north-west angle of the walls of the temporary House of Commons, affording the means of communication between the Public Passage and the space over the Lobby. A part of this space over the Lobby would be separated from the rest by a partition and ceiling, so as to make a room into which Ladies could retire during divisions; and a portion of the gallery, about 12 feet in width, would also be separated from the rest of the gallery, by a partition about five feet high, allowing convenient sitting room for 24 ladies.

The expense to be incurred by these works is estimated at the sum of 280 *l.*

Robert Smirke.

Stratford Place, July 23, 1835.

REPORT on THE LADIES GALLERY



J. Arrowsmith Lith.

Ordered by The House of Commons to be Printed, 28th July 1835

James and Luke G. Hansard and Sons Printers

Veneris, 24° die Julii, 1835.

THE HON. G. C. GRANTLEY BERKELEY, IN THE CHAIR.

Mr. *John Bellamy*, called in; and Examined.

31. HAVE you seen this plan?—I have seen it very superficially.

32. Are you aware of the nature of it?—Yes, exactly.

33. Do you think it almost impossible for the Ladies to be admitted by the present gallery staircase, and do you not think they would find great inconvenience from it?—With reference to the Ladies who are likely to visit the gallery, I think the admission by the present staircase almost impossible, and inconvenient in the highest degree.

REPORT

FROM THE

SELECT COMMITTEE

ON THE

ADMISSION OF LADIE

TO THE

STRANGERS' GALLERY;

WITH THE

MINUTES OF EVIDENCE.

Ordered, by The House of Commons, *to be Printed,*
28 *July* 1835.

REPORT

FROM

SELECT COMMITTEE

ON THE

VENTILATION

OF THE

HOUSES OF PARLIAMENT;

WITH THE

MINUTES OF EVIDENCE.

Ordered, by The House of Commons, *to be Printed,*
2 *September* 1835.

Mercurii, 29° die Julii, 1835.

Ordered, THAT a Select Committee be appointed to consider of the best mode of ventilating and warming the new Houses of Parliament, and of rendering the same favourable to the transmission of sound:—And a Committee was appointed of —

Mr. Hawes.
Mr. Hanbury Tracey.
Lord Viscount Howick.
Mr. Warburton.
Lord Granville Somerset.
Mr. Strutt.
Sir George Clerk.
Mr. Hall.
Mr. Benjamin Smith.
Mr. Compton.
Lord Viscount Sandon.
Mr. Philip Howard.
Mr. Hughes Hughes.

Ordered, THAT the Committee have Power to send for Persons, Papers and Records.

Ordered, THAT Three be the Quorum of the Committee.

Mercurii, 2° die Septembris, 1835.

Ordered, THAT it be an instruction to the Committee that they have Power to extend their Inquiry to the present Houses of Parliament.

Ordered, THAT the Committee have Power to report the Miuntes of the Evidence taken before them.

REPORT.

THE SELECT COMMITTEE appointed to consider the best mode of VENTILATING and WARMING the NEW HOUSES of PARLIAMENT, and of rendering the same favourable to the Transmission of SOUND, and who were empowered to extend their Inquiry to the present Houses, and to report the MINUTES of the EVIDENCE taken before them:——HAVE, pursuant to the Order of The House, examined the matters to them referred, and have agreed to the following REPORT:—

YOUR Committee have examined several Witnesses of high scientific reputation, with a view to collect and make known those general principles on which a good system of warming and ventilating Public Buildings depends; the short time which they have been enabled to devote to the Inquiry, in consequence of the advanced period of the Session at which the Committee was appointed, has obliged them to confine themselves to such general information as was within their more immediate reach; and as the Inquiry has been necessarily imperfect, they abstain from giving any opinion on the comparative merits of the suggestions and plans for ventilating and warming the new Houses of Parliament, which have been submitted to their consideration.

Your Committee have been desirous especially to call the attention of The House, and particularly the attention of Architects, to this important subject, in order that some plan may be systematically adopted for this purpose, before the commencement of the new Buildings, it being the decided opinion of Your Committee, that whatever Plan shall be hereafter selected, provision should be made for its adoption in the first instance by the Architect, so as not only to insure its success, but to prevent needless expense and inconvenience; and that for this purpose also, Your Committee concur in opinion with all the Witnesses examined on this point, that the whole space immediately below the Two Houses of Parliament, as well as that between the Ceiling and the Roof, should be prepared and altogether reserved for such arrangements as may be necessary for the object in view.

Your Committee is also of opinion, that in order to render both Houses of Parliament favourable for hearing in all parts, and to reduce to the lowest practicable minimum all interruptions from incidental causes, that the most careful attention should be given to the form and construction of the interior, as well as to the many minor arrangements connected with it, and which are well pointed out in the Evidence.

Your Committee deem it of importance that the attention of the Executive Government should be called to the Evidence generally, and more particularly to that of Dr. Reid, with respect to the possibility of

improving the present temporary House of Commons as regards Ventilation, but more especially as regards Sound. To hear well in all parts of The House, Your Committee consider to be of essential importance in every point of view, whether with reference to the transaction of public business with decorum and dispatch, or for the general interests and convenience of the Public.

Your Committee, therefore, think it of importance that some, if not all, of the alterations suggested by Dr. Reid should, if practicable, be submitted to the test of actual experiment during the ensuing recess, as the only means of ascertaining with accuracy the soundness of the principles laid down in the Evidence, and their useful application to the future Houses of Parliament.

September 1835.

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MINUTES OF EVIDENCE.

Martis, 4° die Augusti, 1835.

BENJAMIN HAWES, ESQUIRE, IN THE CHAIR.

George Birkbeck, Esq., M.D., called in; and Examined.

G. Birkbeck, Esq. M.D.

4 August 1835.

1. HAVE you attended to subjects of general science beyond your immediate professional studies?—I have.

2. Have you ever considered at all the subject of Ventilation, or the warming of public buildings?—I have paid great attention to that subject—to ventilation as concerned with warming; but more particularly as concerned with keeping an equable and proper condition of the atmosphere of rooms in regard to its elasticity and salubrity.

3. Have you, in the course of your inquiries on this subject, ever met with any one large public building which is warmed and ventilated better than another?—I must certainly say I never met with one that was well warmed and ventilated. That large public buildings differ in their degree of imperfection I know, but they are all very imperfect.

4. Do you attribute such imperfection to the want of practical knowledge on the subject?—I do; heating and ventilation, especially the latter, seldom entering into the mind of the builder when he projects his building: he begins as if he did not know that ventilation could be necessary; he trusts to the doors and to the windows, to neither of which belongs the business of ventilation. The doors admit the occupants to the chambers, the windows the light; and apertures ought to be introduced to admit air for ventilation as regularly as the other openings.

5. Your opinion is, then, that previous to the commencement of any great public building, some plan of warming and ventilating should be well considered in the first instance?—Certainly.

6. Not only in reference to its being successfully adopted in practice, but also in reference to economy?—Unquestionably; it can neither be successful nor economical if it be put in as an afterthought.

7. Do you happen to know of any public buildings which have been altered, and in which great expenses have been incurred, for want of such previous inquiry and consideration on this subject?—Repeatedly, and never with successful results.

8. Can you give the Committee any general information on this subject?—It appears to me to be quite referable to strict calculation. It must be first known how many individuals are expected to occupy a room; it must then be ascertained what impression they will make upon the atmosphere that is within it; it must be then determined what apertures are to be provided for introducing fresh air; and lastly, what number of apertures, and of what area, must be provided for the outlet of that air, which has been rarefied and rendered unfit for the purpose of the occupants; when all this is done, you have reduced the matter to a clear calculation.

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9. Do you not think that, if the principles of ventilation were reducible to mere calculation, it would before now have been better understood?—No, I do not; because, although the effect of a chimney is a matter that is calculable, and may be estimated in all respects scientifically as well as practically, it has very seldom happened that a chimney has been well or judiciously built. Builders and architects resist the knowledge to which they ought to have recourse.

10. When you state they resist the knowledge to which they ought to have recourse, can you point out any source from which such knowledge can be clearly obtained in order to be practically applied to the new Houses of Parliament?—We have very few works in which ventilation is considered in detail; the best, I believe to be the work by the late Mr. Treadgold, on the ventilation and warming of rooms.

11. Can you refer the Committee to any other works, whether British or Foreign, or to any practical treatises?—Dr. Hall, Mr. Whitehurst and Dr. Franklin long ago wrote very ably on the subject of ventilation; and there are many valuable remarks scattered through our Encyclopædias. The Encyclopædia Britannica contains some valuable remarks on ventilation in a very good article on Pneumatics, written for the sixth edition by Professor Robison; and the Encyclopædia conducted by Dr. Rees contains a good article, although rather concise, under the word Ventilation.

12. Now, considering ventilation not only as to mere change of air, but as also comprehending the supplying of a purer air, have you ever turned your attention to ventilation in that point of view?—Certainly; because that is strictly included in the other. If you change the air, it is because it is either impure or heated, and by introducing cool air from without (whence it ought always to be introduced), you secure both points; you carry away the vitiated part of the atmosphere, and you carry away the heated, and therefore the most expanded portion of it.

13. Do you think a supply can always be obtained equally pure from without?—Unquestionably; because you can always take it from the general mass of the atmosphere, in which numerous chemical experiments have shown that there occurs no important variation.

14. But, assuming you obtained the air from the exterior, and assuming the atmosphere to be foggy, have you ever considered ventilation in reference to supplying the inner chambers of a building with air purer than the atmospheric air under such circumstances?—No, it has not occurred to me to think that necessary. I have always believed that the general stock of air was sufficiently pure and sufficiently abundant for all the purposes of room ventilation. I have never known, I think, an instance in which it ought to be considered otherwise.

15. Considering that a large public building is about to be erected on the banks of the river, and that the level of the foundation is perhaps the lowest level in or about London, very little above high water mark, do you not think it desirable that ventilation should be considered in reference to the pure supply of air at all times, as well as the change of air?—Certainly; and therefore that a mode of filtering or otherwise ameliorating it, if it should be found to be impure, ought to be sought after.

16. Have you turned your attention to the state of the humidity of the air, and the effect of either dryness or humidity upon the skin?—I have; and in a few instances I have known it so moist as to make it probable that it would be prejudicial, and then I should certainly endeavour to supply a room with air passing through cavities previously warmed or dried, which would not, I apprehend, be difficult to accomplish.

17. If in very cold weather air is heated to a considerable temperature, it would be found to contain less moisture, will it not, than the air of summer of the same temperature?—I believe it will.

18. Therefore in that case it would be necessary to introduce moisture into the air in some way?—Perhaps it might; but I think that is a refinement in the management of the atmosphere that we have hardly yet reached; and the necessity for which, excepting in very rare instances, we have not yet discovered.

19. Have you ever been in a manufactory warmed with pipes of hot air or water?—Yes, I have.

20. Have you observed that in this manufactory they find it necessary to provide some means for introducing moisture into the air so heated?—They did not introduce moisture into the manufactories so warmed which I have seen; and I should think that if any difficulty were to arise, it would be from heating the air too much by those pipes. I do not think that the moisture in the atmosphere is very essential to the health or to the comfort of the individuals immersed in it; I think dry air

is

is quite as good as moist air; and it has one great advantage, it carries off the fluids of the surface, which ought to be carried off, more certainly than when moist, or when it is itself charged with water.

21. What effect, speaking chemically, do you consider to be produced on a large body of air in a crowded room imperfectly ventilated?—In the first place, it is rendered of too high a temperature; next, it is deprived of a large portion of its oxygen gas; and next, it will contain too much carbonic acid gas, into which that oxygen had been converted; besides being rendered too moist for comfortable feeling, by the quantity of fluid exhaling from the surface of the persons included. This would not be the case to the same extent through the whole of the included air, the upper portions, according to the experiments of Lavoisier, performed with air collected from the theatres of Paris; the superior portions being more charged with azotic gas in proportion, and the lower containing more carbonic acid gas and being of greater specific gravity.

22. Do you not think that any system of ventilation which should be adopted should hence comprehend the drawing off the impure air as well from the bottom as the top of the apartment?—No; because if this apartment, about the atmosphere of which we are speaking, were provided with adequate apertures at the top, the azotic gas and all the expanded air would pass through those apertures, and the carbonic acid gas diffused through expanded gas would necessarily be carried off along with it through the higher openings. It certainly would be thus removed, like the carbonic acid gas, indeed, which is driven up a chimney by the force of the colder and heavier air always pressing behind it.

23. You are of opinion that the difference of the specific gravity between the cool and the warm air would more than counterbalance the difference of the specific gravity of the carbonic acid gas and the ordinary atmospheric air of the same temperature?—Certainly; so far as, when diffused through the air, to admit of its being carried upwards by the motion of that air.

24. How hot do you suppose that a large assembly would wish a room to be, to be kept comfortable?—Not higher than from 50° to 65°; but 60°, I should say, would be generally preferred; but I would add, that the occupants of that room are not to be pestered by streams of air flowing in at windows and doors and other places, which would render them so uncomfortable as to occasion the necessity for a degree of heat higher than the general temperature of the room.

25. Do you not think that lamps or chandeliers might also be made a means of assisting the ventilation?—Unquestionably; by placing the lights, for instance, underneath your highest aperture, you would give to those apertures something of the effect of a chimney, taking care, however, to do that which people have not generally done, to make openings in the covered space above, by which the heated air may escape. There are many buildings, I believe, that have air holes in the ceiling of some of the rooms, but have no opening in the roof above them to let out the hot air that has ascended through the apertures in the ceiling.

26. Do you think those apertures communicating with the outer air ought to be so contrived as constantly to turn from the wind, so as to avoid adverse currents?—Probably that would be unnecessary if there were a full supply of cold air below; for as regards the chimneys, or at least most of them, for which those movable covers or cowls are required, it has been found that they have been chimneys which, as it is termed, draw badly; but I believe that, for the purposes of ventilation, the heat, and consequent ascending force of the air, would be quite sufficient to keep up the discharge from those apertures in the roof or other suitable places, if there were a well regulated supply of cold air below.

27. Would not a current of air be apt to impede that process?—It would in some degree, and suitable measures must be taken to lessen or remove the impediment.

28. Would not a cowl be the best mode of preventing that?—Perhaps it might, if it works well. Sometimes cowls fasten themselves, and then they become disadvantageous.

29. You would under no circumstances admit any air that was not prepared; you would not admit it directly from the external air?—I should, under most circumstances, admit it from the general mass of external air without preparation, through tubes or through openings in the lowest part of the room that was to be ventilated.

30. Would you not make it a condition of good ventilation, that the air admitted should always be admitted at a known temperature?—Unquestionably. It would be

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be a great improvement if, along with the best system of ventilation, or the admission of sufficient air from the purest source, you provided a supply of a certain requisite temperature.

31. Do you think it would be an improvement, in the ordinary practice of ventilation, to have the basement room kept to prepare the air?—That arrangement would be almost indispensable in a well combined system of warming and ventilating. Air might thus be provided warmed when necessary, and so managed as to its quality as to render the ventilation perfect.

32. And cooled if necessary?—It might flow through tubes artificially cooled if that were desirable.

33. Can you give the Committee any plan for ventilating or warming the House of Commons, or suggest any mode of ventilation, free at the same time from the inconvenience of draughts of cold air from the doors or other openings?—I could perhaps assist a practical man with a few useful hints if he were disposed to listen to the suggestions that I might offer to him. I do not know that I am quite competent to lay down such a plan in detail as would be fully suitable in practice, not being a practical architect. It would be found defective in many of the details.

34. What is the best mode of ventilation hitherto that you have seen?—I really have never seen a room ventilated with strict reference to the whole purposes of ventilation; where it has been done at all systematically, it has consisted in making a certain number of openings in the lower part of the room and a certain number of openings in the upper part of the room; often without any correspondence in their areas, and often without any supply of air to the lower openings, or any suitable means of escape for the air from the upper. So that a plan apparently correct and systematic has contrived to defeat itself.

35. Is the Committee to gather two points from your evidence, that, whatever system of ventilation is adopted, there ought to be a communication between the upper part of the ceiling and the exterior of the roof?—Yes.

36. And that you recommend the lighting to be so high that oxygen in the lower part of the room might be as little consumed as possible?—Certainly; and that the heat liberated in producing the light might assist the ascending column of air and promote the ventilation.

37. What preparation do you think necessary in a new building to prepare for proper ventilation: have you ever turned that in your mind?—No; I never had an opportunity of being concerned in the ventilation of a new building of any magnitude.

38. Upon your plan, the Committee understands that you propose to have a body of air under the basement floor, and that of a certain temperature, and constantly pumped into the building?—Not pumped, but constantly passing into the building by its own power.

39. Are you aware that in the Houses of Parliament, particularly the House of Commons, the number of persons varies from 50 to 800 or 1,000, and not only so, but it varies in gradual progression backwards and forwards, sometimes very few, sometimes many? Looking at that peculiarity in the Houses of Parliament, would you say that all the statements you have made relative to any general principles are or are not sufficient to remedy that inconvenience?—Quite sufficient; because I should set out with providing for the greatest number of persons (say 1,000) that would occupy the place, and provide means for the renewal of air for that number. Then if I had provided for them, I should of course have provided for any inferior number; they would heat the atmosphere less than the larger number; there would be less motion, and therefore less change of air. As the number increased the current would increase, and therefore there would be a provision for every intermediate quantity between, we shall say 50 and 1,000.

40. Now, taking that into consideration, at what temperature would you conceive that the air in this supposed basement chamber should be kept?—I should say at about 50°, perhaps.

41. You would never have it less than 50°?—Not less than 50°.

42. Under no circumstances?—I am not quite sure that it might not require to be of lower temperature when there was a very great degree of heat above. It would require to be the lowest when the chamber above was the most full.

43. Now, taking the winter and the summer months, what difference would you make?—I presume that the difference in the natural temperature of the chamber would be from 40° or 35°, say 40° to 70°; we should be obliged to add considerably more

more heat when the temperature was at 40° in a large room, and we should have to cool it if the natural temperature within the room were 70°.

44. Then, in fact, you would vary the temperature of your basement chamber air according to summer and according to the persons that you might suppose to be in the room?—Certainly, in order to ventilate and to warm perfectly.

45. But still you state you have never seen any house or any apartment scientifically ventilated?—No attempt, that I am acquainted with, has ever been made on such an extensive plan of accommodation as we have been projecting.

46. And you believe no architects have had recourse to scientific works, to afford themselves information on the subject of ventilation on scientific principles?—I do not think that they have done all that they ought to have done in that kind of investigation or research before they have begun to erect their buildings.

47. And that without any exception within your knowledge?—I do not recollect any at present; I probably ought to recollect some.

48. Do you know any work that has been written, or any contribution to any learned society made by any architect of eminence on the subject of ventilation?—I know that attention was paid to that subject by Mr. Benjamin Wyatt, as appears by a work on Theatres published about the time of rebuilding Drury-lane Theatre. One of the four divisions under which he manages his observations relates to the warming of theatres and ventilation. The second relates to the mode of obtaining the best vision and hearing. So that he has considered it certainly. Probably Saunders, in his work on Theatres, published about the year 1790, has paid attention to it; but it is so long since I saw the work that I dare not venture to say positively what it contains.

49. I believe you have not made any remark upon draughts; have you any way to prevent draughts or currents of air from being unpleasant in rooms?—My idea is to prevent them altogether, by introducing air in places where no one would be incommoded by it, and thereby preventing its flowing in from open windows and open doors. Where those entrances for the air should be, it is a little difficult to decide; the entrance must be either through the floor simply, or through tubes above the level of the skirting board; or if through the floor, I should propose, if deemed by architects advisable, to introduce it by short tubes placed in small semicircular niches, which should be formed within the wall and allow the air to flow upwards within the niche, and thereby not incommode any one. I do not know how far architects would approve of this suggestion.

50. Would you introduce large quantities of air through large openings, or small quantities of air through small apertures distributed about, in order to prevent the inconvenience of draughts?—Certainly, provided the large openings are judiciously situated.

51. Do you not believe that draughts depend upon the temperature at which the air is when coming into the rooms, that should an excess of warm air be called a draught, that may be very pleasant?—We should call that a warm current.

52. A strong current of air would be objectionable, whether at a high or a low temperature?—Certainly.

53. But a current of air playing upon any part of the human body, whether it were of the temperature of the room or not in which the person was placed, would be objectionable, would it not?—Certainly, it would not be well managed, and might be objected to if it were rather hot. I do not know that it would do any actual harm, but it would be unpleasant. The term draught certainly applies to cold air in motion, and for this particular reason, very few persons have been in rooms so circumstanced that they have any other than cold draughts, warm draughts being very rare.

54. What is the speed of a pleasant summer breeze in the open air?—The motion of air moving at the rate of two or three miles per hour is just perceptible; we call air moving at the rate of four miles or five miles an hour a breeze; at 10 or 15 a pleasant brisk gale; beyond that it becomes a wind; and when moving at the rate of 50, 60 and 80 miles an hour, it becomes a storm, tempest and hurricane.

55. What is the ordinary rate of an ascending current in a chimney?—From four and a half or six feet in a second, or about three or four miles an hour.

56. If the air be admitted at an agreeable temperature and of a pleasant degree of humidity, no draught that ever came into the room would be of such a rate as to be deemed unpleasant?—Certainly there would be no probability of the occurrence of any thing like a disagreeable degree of motion.

 57. Should

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57. Should it not be a condition of good ventilation that the change of air should take place without being perceptible?—Yes.

58. Do you think that is an impracticable condition from your general information?—I think it quite a practicable condition.

59. Do you contemplate the possibility of forming any building so ventilated as at all times to keep the atmosphere in a pleasant state, containing at different periods such a great variety in the number of persons as from 50 to 1,000?—There certainly must be some difficulty in accomplishing it, but I think it may be materially approached to; we may arrive at a temperature under all these changes that will not be positively noxious, or even inconvenient.

60. Would it not be very desirable as much as possible to prevent the effect of the atmospheric changes from without from being felt within?—Certainly.

61. And therefore the thickness of the walls and other circumstances of that nature ought to be attended to?—Undoubtedly, or else you would have more difficulty in conducting your warming and ventilation.

62. Therefore one great object would be to make the ventilation as little liable to perceptible variation as possible?—It should depend entirely on the inflowing air, and the outflowing at the apertures provided for this purpose; the inflowing air must be regulated by artificial means.

63. Now, with reference to the apertures of which you have already spoken, to what height from the floor of the building do you think they should be raised?—They ought to be made in the lowest part of the room, and therefore in the floor, if practicable; and consequently, if not in the floor, as near as possible to it. The position of these apertures must, however, be materially influenced by the taste of the architect and the mode of occupying the space as regards the position of chairs, benches, &c.

64. With regard to the question which was put before, as to the effect of air passing, in the process of ventilation, through iron pipes, do you conceive that the material through which it passes can have any effect at all upon the air?—Not any substantial effect.

65. Then you consider the material through which you conduct air as of no importance?—As of very trifling importance, because it never could, if properly managed, acquire such a high temperature as to make an impression upon iron, nor could it, I think, in any other way affect the adjacent portions of the atmosphere.

66. Do you conceive, by the air passing through iron pipes, it would or not be affected by such passage?—As I have just said, the only injury would be excessive temperature, not having relation at all to any quality imparted by the pipe.

67. Could you recommend any simple method of correcting the imperfection of the air to be introduced through the ventilators or through the pipes?—When necessary, which will be very seldom, the air might be purified by passing through lime water, or through chloride of lime, both simple processes.

68. If the air is brought through a subterraneous tunnel, at a distance from the river, or an open space, do you conceive that necessity would arise?—Not at all, I think, necessarily. The other supposition is very problematical; but it would be provided against, I think, completely, by the means just mentioned.

69. Do you conceive that the neighbourhood of a river necessarily makes the atmosphere more impure?—Not necessarily. I believe the opinion of the inhabitants of London is, that living near the river they live in air of greater purity generally.

70. But does your scientific opinion coincide with that popular impression?—I am of the same opinion, except so far as the sewers emptying themselves into the river are concerned.

71. Supposing that to be the locality of the Houses of Parliament, do you suppose, if the air was taken by subterraneous tubes from a large building like the Abbey, for instance, that it would be better or not for the purpose in view?—I think it would. I do not see any objection to air within such a cavity as that would be, and perhaps there is no source of impurity even to which it could be subjected.

72. Your opinion is, that the atmospheric air can be improved or purified?—Occasionally. My general notion of the state of the atmosphere in London is, that it is in all parts sufficient for the purposes of human respiration, and that a great deal more has been said about the bad air, and a great deal less about the bad habits of London than ought to have been said.

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73. Have you ever heard that a river, having partial embankments, is apt to generate disease from the noxious vapours that are exhaled from the embankment?—Not where the embankment was employed to keep out water; but where an embankment has confined water on the other side, so as to render the water stagnant behind it, then it has produced fever; but that is the only mode in which I conceive it has done so. With respect to embankments, I should have said, by way of explaining what I stated before, I was not aware that the ground obtained by an embankment was to be the foundation upon which any thing was to be built. If it is to become the spot upon which buildings are to be erected, then the question is, what is the state of the land for obtaining which any given embankment is thrown up? for that would determine the consequence. An embankment may be said to be simply and merely the occasion of a contraction and consequent acceleration of the stream of a river by means of an encroachment upon its natural bed or banks, which occasions of course a division of the breadth of the river, or of the water-way. If you were to build upon an embankment, then I should say you had not secured a good foundation.

74. Supposing that the river should be embanked to the amount of 78 feet, do you conceive, supposing a part of the building of the new Houses of Parliament to be placed upon that embankment, any prejudicial effect would arise therefrom?—None, after it became as dry as the adjoining soil, which would be the case in no very long time.

75. In reference to what you have said as to embankments, would not the probability of fever, arising from buildings being placed upon an embankment, depend upon the nature of it as to whether it would admit water to soak into it, become stagnant, and engender effluvia by its decomposition, and thus produce fever?—Entirely, because there is no species of fever in connexion, as to its origin, with water, or banks or lands, but that which arises from the decomposition of animal and vegetable matter, through the intervention of moisture.

76. Do you think any embankment could be so constructed as to prevent that soakage going on?—I think a modern canal maker would know very well how to do that.

77. Would you be quite satisfied with the system of puddling?—Quite. I have seen enough of puddling to know that it completely prevents the passage of water through the banks.

78. Then supposing it to be a fact that in the case of New York, and in the case of some Italian cities, that fevers are more frequent in buildings upon such embankments, how would you account for it?—I very much doubt what is alleged to be the fact, and therefore am not disposed to attempt an explanation.

79. Do you conceive that the plan of ventilation which you propose of a chamber under the House of Commons, and the air to be prepared, could be done at a small expense?—I should suppose it might be conducted, after being once established, with very little expense indeed. Upon the whole, I should expect it to work itself, or to be in a great measure automatic. The air would occasionally require warming and perhaps cooling: sometimes it would require drying, and sometimes moistening; but I do not know that it would. I should expect the process to be nearly automatic.

80. In such a building as the new House of Commons, where the number varies greatly, it would be necessary to have the power of a very rapid change, either of heating or cooling the air which is introduced?—That would be very easily accomplished. By the regulating valves you could let in a greater or a less quantity of hot or cold air, according as it might be required.

81. You have been asked about the probable expense of a good system of ventilation; now considering that so many of our eminent public men are for so many hours exposed at present to a deleterious atmosphere in the Houses of Parliament, do you think any expense, within a reasonable compass, should be considered in opposition to attempting a good system of ventilation?—Certainly not; I do not think that it ought to be a consideration.

82. Are you of opinion that the expense would be great, provided a good system was selected for the original construction of the building?—I am quite sure that it would not. The smothering system adopted at present is terrible; I am sure I for one would not endure it for the service of the public.

83. Do you not think in the construction of the new building generally, with reference to staircases and the galleries, that they should also, in some degree, be made subservient to ventilation?—If the plan I have proposed were adopted, the staircases

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staircases and the galleries would have nothing to do with the ventilation; it is one great object to keep them out of the arrangement, or the place would abound with draughts immediately.

84. But the question now applies rather to a building generally—particular rooms might be subject to particular ventilation—but with reference to the construction of the building generally, do you not think it possible that the staircases, corridors, &c., might also be made useful in ventilation?—Certainly, they ought themselves to be ventilated; but I believe we should do better without their interference in the ventilation of other parts of the building.

85. In the case of mines, you are aware that ventilation is carried on almost wholly by galleries and doors, by creating a current of air it removes artificial obstructions?—Yes, I am; but the best mode of ventilating mines that has been devised is that of Mr. John Martin, the artist, he does not admit of that species of ventilation adverted to in the question, he avoids the existence of chambers, or any thing but one great gallery surrounding the mass of coal to be removed; he ventilates that and that alone.

86. Is that in mines?--Yes.

87. Did Mr. Martin ever turn his attention to the ventilation of houses?—Probably he did, but I have had no conversation with him upon the subject. He has an admirable idea of the ventilation of mines; his mode of working a mine so as to have no other cavity but the great ventilating cavity, and to work against the face of the coal from that cavity or gallery, is an admirable plan.

88. You spoke in the early part of your evidence about chimneys, have you any particular mode of erecting chimneys so as to prevent their smoking?—I believe if the principle of ventilation is properly adopted in a room, and the chimney is constructed according to Mr. Hiort's circular plan, it could not fail to carry up effectually all the smoke which would be produced by the burning coals below.

Veneris, 7° die Augusti, 1835.

BENJAMIN HAWES, ESQUIRE, IN THE CHAIR.

Mr. *John Sylvester*, called in; and Examined.

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89. YOU are an engineer?—Yes.

90. Have you turned your attention to the ventilation and warming of large public buildings?—I have.

91. What buildings are there that you can particularly refer to that you have succeeded in ventilating?—I can refer to the Lunatic Asylum for Kent.

92. What is the mode adopted?—The adoption of arrangements by which fresh air may be introduced slowly and in any quantity desired into the inclosure to be ventilated.

93. Is your plan adapted as well to cool as to heat rooms, by introducing either fresh cold air or warm air?—The arrangement would be, to introduce fresh air, without reference to temperature in the first instance, and to provide an apparatus by which it may be made agreeable and fit for breathing at all times.

94. Is the plan that you have introduced into this Lunatic Asylum of which you spoke as well calculated for fresh cold air as for fresh warm air?—It is.

95. Now state your mode?—I should form a channel of communication with the atmosphere and the basement or under story of the inclosure to be ventilated, and provide an apparatus through which the air may flow, which will furnish the degree of warmth and moisture required to make it fit for the purpose of ventilation.

96. State the description of your means; how do you set the air in motion in the channel; do you make it pass from the open air into the chamber to be warmed or cooled?—The opening to the atmosphere is directed to the wind by a cowl or cap, so that the fresh air may freely move into it.

97. But in a period of very hot, calm or oppressive weather, when you are most in want of fresh air, will not this cowl be inoperative as a means of conveying a current of fresh air?—It would.

98. Have you introduced any other plan than the cowl?—That is but one part of the system. In the roof of the building, above the level of the ceiling, warming surfaces

surfaces are exposed, which renders the cavity within the roof at a higher temperature than any part of the inclosure to be ventilated. From this cavity of the roof another communication is to be formed with the atmosphere, provided also with a cap or cowl, to preserve the opening from the wind, the action being the reverse of the one before alluded to. The rate at which air can be economically set in motion through the channel for supplying the fresh, and for the discharge of the vitiated air, is about four feet per second. The rate at which it would be desirable to permit the air to flow into the inclosure or room to be ventilated would be about half a foot per second, or about the third of a mile per hour.

99. What would be the apertures through which you would admit it into the inclosure?—By apertures disposed, if practical, over the whole area of the floor.

100. What might be the area of those apertures?—The area of the whole should be about 665 feet. I have estimated that the whole of the inclosure of the House, the corridors and staircases, which should all be influenced by this attempered atmosphere, might contain about 200,000 cubic feet of air.

101. And supposing the air to be admitted through the apertures you have mentioned at the velocity you have stated, in what time would the whole air of the space be changed?—This volume of 200,000 cubic feet would be admitted and discharged six times within the hour.

102. How do you communicate heat to the air in the rising column at the top of the chamber?—The easiest mode of doing that in this case might be by exposing surfaces acted upon by steam within the cavity of the roof, and consists in providing as much heating surface in that cavity as will at all times raise the air to a temperature sufficiently above that of the inclosure, under any circumstances, to give the degree of motion required.

103. You mean a series of parallel plates alternately filled with steam and air?—I think were there pipes into which the steam could be admitted, and allowing the air to flow in contact with their surfaces, would be all that would be necessary. It consists entirely in arranging that the surface exposed in the heated cavity of the roof may be sufficient in quantity to establish a difference of temperature which would give the motion necessary.

104. What is the temperature of the air as it issues from the steam surfaces after being heated?—That depends, of course, on the quantity of surface and the time the air is in contact with it.

105. We are speaking of the way in which you have already put this in practice; what is the temperature that you consider most advantageous?—It has never been found necessary before to apply so large a surface, nor a surface of the same kind for this purpose; it has usually been done by providing large chimneys in communication with the inclosure to be ventilated, and applying fires to heat the columns of air in the chimneys.

106. Then you have this additional apparatus in consequence of the greater difficulty, I presume, of warming such a building as the House of Commons?—Certainly, in order to obtain a rate of motion for the admission and discharge of as much air as is contained in the whole inclosure, six times within the hour. The quantity is to be ascertained very easily, depending of course upon the arrangement of the building.

107. In case of your admitting warm fresh air, what is the mode in which you propose to heat it, and at what temperature will you allow it to issue through the small holes into the rooms to be heated?—It is my opinion that the air would be required to be admitted within five degrees (Fahrenheit) of the temperature it is desirable to have the compound within the inclosure of the House, &c.

108. Five degrees lower?—Or higher.

109. What is the mode of heating?—I should recommend in this case an apparatus to be erected in the story beneath the House or the basement, constructed of cast iron, and exposing a very large surface for the fresh air to flow in contact with, the arrangement of the surface being such as to divide the supply of fresh air into a large number of very small streams. The under part of the metal surfaces being heated by inclosing water or steam, the air so divided into small portions would be allowed, by this arrangement of apparatus, to flow in contact with such warming surfaces, very equally affording the moderate and varying excess of warmth of the air required.

110. And when heated, what becomes of the air in that instance; where would the air be carried after being in contact with this heated surface of metal?—It would be allowed to flow under the whole area of the House.

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111. You would carry it immediately then to the small holes through which it is to escape into the House?—Nearly so, allowing it to flow as equally as possible over the whole area.

112. There is a direct communication then, if I understand you right, from the heated surface of metal to the cavity which is under the floor?—Exactly so.

113. In some of the apparatus which I believe you have constructed for warm air, you have heated this surface of metal by direct radiation of fire?—Yes.

114. Why in the present instance do you prefer the steam or hot water?—Because a very moderate degree of warmth would be desired to be given to a very large quantity of air.

115. How do you, by your apparatus, contrive to bring the air to precisely the temperature at which you wish it to be, and which you have stated you think ought to be within five degrees of the temperature of the room to be heated?—The air is in contact with the warming surfaces a certain fixed time, and the warming surfaces may be at one or another temperature, varying it by the degree in which the warming surfaces are heated.

116. Do you think it is easy, by your apparatus, completely to regulate the temperature, so that in a short time, if the House is too much heated, you can reduce the temperature of the air exactly to the required degree?—It is very easily managed; it would take place in ten minutes after such notice. The quantity of air would be so great that it would not be easy to raise its temperature to such an excess as to produce inconvenience.

117. Is it not the case, if the surface which is to heat the air is to be warmed by steam, there is hardly an intermediate degree between being absolutely cold and being of the temperature of boiling water?—It might be so; but the warming surfaces for the air in this case would be composed of cast iron, which is of considerable thickness, and the tubes which divide the air into small portions are cast with and form part of the mass, so that by conduction a great portion of the heat of the plate is transmitted to the substance of the tube itself, the heat only being applied to the under surface of the plate.

118. Do you obtain any intermediate degree between the temperature of the air and the temperature of boiling water—you want to adjust it so nearly, it appears, as to come within five degrees?—It would be only necessary to discharge the steam at intervals, that would afford less or more heat to the surfaces, but I have not determined the point, whether inclosed heated water or steam would be the most convenient means of heating the air, warming tube-plates, as to the easy adjustment of the heat, but am inclined to think either means would answer the purpose; if water were used, its temperature might be adjusted by a thermometer.

119. Do you think you will ever be able to adjust it accurately unless you admit the air into some intermediate chamber, and there mix it in the requisite degree with cold air, so as precisely to attain the temperature required?—I think it quite possible to attemper it and make it fit for the purpose of breathing.

120. Do you see the difficulty, if you employ steam, that you either have the tube of the ordinary temperature, or, if filled with steam, they are up to the temperature of 212°, and that you have no intermediate degree between the temperature of the air and the temperature of boiling water?—I do not see that that would be the consequence of the arrangement proposed.

121. What advantage is gained by steam?—The power of allowing it to act or not, or the power of allowing it to act in any degree on the warming surfaces; I am not at all certain that a mass of water might not be more convenient for the purpose.

122. Do you believe that either by steam or water, without taking the air to an intermediate chamber into which to regulate the temperature, you can bring the air within five degrees of the temperature you require?—I do, indeed.

123. Uniformly and with very little trouble?—Yes; the quantity of air passing through is so great that it would be difficult to afford more heat to it than it requires; the excess of temperature to be afforded to so large a quantity of air as is here proposed to be used would vary very little indeed.

124. In case of mixing warm air with cold, or in the manner you propose, in order to acquire the requisite temperature, it would equally depend, would it not, on the persons who have the management of the apparatus in a due degree?—I do not know, indeed, how such an arrangement could be attended to, nor do I think it necessary when the quantity of air is so large; it would be so if a small quantity of air was desired to be admitted, and that at a great excess of temperature.

125. Do you think it is very preferable to use surfaces heated either by steam

or hot water, in order to avoid the burnt smell, or the excessive dryness which is occasioned in the air, when surfaces liable to be overheated by naked fire are to be used?—I do not think on that account it is necessary, because any good arrangement for warming air ought not to be liable to such an objection; whatever mode of heating might be employed, if the mode were properly applied, no such result as that ought to be produced.

126. In the mode you have sometimes adopted by the heated cockle, and where cold air is made to come very rapidly in contact with the surfaces, have you not heard objections when that plan has been used in private houses, have you not heard complaints of the disagreeable feeling to the lungs?—Indeed I have, it is easy to produce that mischief you speak of.

127. Do you know a house in Portland-place where it was put up, and afterwards taken down, in consequence of that very complaint?—No, I am not aware of it.

128. You would not recommend that plan for heating the House of Commons?—I should certainly take care to avoid any such evil.

129. In the case of your wishing to introduce cold air instead of warm air into the House, how would you proceed?—By allowing heat to be applied to the warming surfaces in the cavity of the roof only, so as to give to that cavity an excess of temperature beyond the temperature of the stratum of air within the inclosure, or within the House, and to allow the air to flow in over the surfaces, which are of course not then required to be heated.

130. You will not take any means of cooling the air, but you merely admit it to the temperature of the outer air?—I should say, for the sake of cooling the air in some degree in the summer, and for the sake of warming it in some degree in the winter, it would be exceedingly desirable to bring the fresh air for the supply of the Houses from some distance, by a channel under ground (carried out to some distance); if carried the distance of 100 yards, supposing it possible to do that, the air would be warmed in winter, in severe frosts, about fifteen degrees, and in summer it would be in the same degree cooler.

131. From whence would you draw your supply of cold air?—I would say it might be drawn from the square in Palace-yard.

132. When you say taking it under ground, do you mean that the temperature of the air in cellars is above the winter temperature, and below the summer?—Yes.

133. But still, are you not aware, if you change the air in the cellars by causing a circulation to pass through them, the air in the cellars will no longer have that temperature, unless you have a very large cellar indeed, where the air can remain long enough, and have a surface large enough to acquire the temperature of the sides of the cellar?—Exactly so; it is on that principle that this arrangement of the long channel is proposed.

134. Could you not cool it by wetting the surface of any tubes or channels through which it might pass?—It would, in my opinion, be very difficult to apply such a means in this case.

135. Would it not be materially cooler in that way?—It might be cooler there is no doubt.

136. About what sized tunnel would be necessary to cool or keep the air?—The area of the channel which I have calculated upon as under ground ought to be at least 83 feet in area, say a little more than nine feet square.

137. Do you imagine that the surface of a tunnel nine feet square would subtract in summer or add in winter a sufficient quantity of water to cool that quantity of air 15 degrees?—It would depend, of course, on the length of such a channel.

138. Brick or common earth, of which the sides of the channel would be constructed, and even if the sides were of iron, common earth being in contact with that iron, and being a bad conductor of heat, would not the temperature of the surrounding earth be quickly communicated to the air, and would not the surface of the whole very soon acquire the temperature of the atmospheric air that is passing through it so constantly?—I state that fact, of air being cooled and warmed by passing through a long channel under ground, from my observation of that at the Kent Lunatic Asylum; where there is a long channel of this kind, I have observed a difference of temperature equal to what has been stated.

139. What is that channel composed of?—Common stone-work.

140. Is this mode of ventilation applied to the sleeping chambers or sitting rooms, or what parts?—The whole of the galleries and sleeping rooms.

141. Is it a brick or stone gallery?—Stone-work.

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142. Do you find, after a long prevalence of frost or heat, whether the cooling power of the tunnel would be so great as you have represented?—I am perfectly certain of it; I have examined it during summer and winter, and I know, on the average, that is the effect.

143. Can you state what the length of the tunnel might be?—I believe the tunnel is about 200 yards, and the area of the tunnel is 30 feet, six feet square.

144. And the rapidity of the air?—Somewhat more than four feet per second.

145. Have you calculated the dimensions of these channels as well as the extent of the heated surfaces in the steam apparatus below, and the extent of the heated surfaces in the apparatus above, necessary to give a change of 200,000 cubic feet of air six times an hour, or 1,200,000 cubic feet of air an hour?—It is.

146. Have you computed the dimensions of all this?—No, I have not; I have not calculated the area of the surface necessary to produce the effect; but I have all the data for that.

147. You have the dimensions of the flues, but not of the heating apparatus?—Exactly so; I have supposed the area of the floor to be 4,000 feet.

148. Is that stream of air in this case passing through the subterraneous channel night and day constantly?—It will be necessary to provide a means of closing the fresh air channel when the House may not be in occupation; but when the House was occupied, the ventilating would be in full action, and ought to go on without interruption. I have supposed the floor of the whole inclosure to be 4,000 feet, which would not be far from the dimensions necessary to make the inclosure of 200,000 cubic feet, with the usual altitude, and supposing the whole current of air to move over the whole area of 50 feet in ten minutes, or at the rate of 300 feet an hour, one-third of the rate at which the current is proposed to be admitted into the House through the openings.

149. You compute this 200,000 cubic feet to be the cubic content of the whole building?—Yes, to be the inclosure of the building, staircases, windows and such rooms as would be in immediate communication, for it is desirable that all these parts of the building should be operated upon.

150. Not the whole building?—It would be desirable to include the whole building.

151. Assuming 200,000 cubic feet of air to be the dimensions, have you calculated the cost at all of such an apparatus; can you state a sum it would not exceed?—I think the whole—I am not including driving the channel for a distance under ground, that would depend on its extent—I suppose such an apparatus might cost 2,000 *l.*

152. Exclusive of the channel which you have spoken of?—Yes, which is undetermined.

153. You do not think it would exceed that?—I think not.

154. This includes pipes and channels within the House?—Yes; the formation of these channels is rather a distribution of the same mass of materials generally required for a building than in any addition.

155. Therefore you consider it on that account of great importance that the mode of warming should be fixed before the building is commenced?—Certainly; I think it impossible to do any thing quite efficient after the building is finished, at any expense.

156. Have you put your plan in practice any where, so as to ascertain that you had the heat completely under your command, and that upon receiving a quarter of an hour's notice you can change the temperature of the air to be admitted into the House, so as to bring it, as you stated, within five degrees of the temperature of that within the House?—I am perfectly certain, that with the arrangements proposed, such adjustment may be made in ten minutes at any time.

157. Have you actually constructed such an apparatus any where, so as to know practically that you have the temperature so under your command?—Yes.

158. Where is it?—I should refer to the same building, the Kent Asylum.

159. This is treated in the same way?—The warming surface is not of the same kind, I used, for the sake of economy, cast iron heated by fire, each stove having a distinct apparatus.

160. Can you state any other instance on a similar scale?—I have constructed an apparatus at the Trinity House, but where a very rapid ventilation is not required.

161. Is that by the iron cockle?—No, it is not, it is by a surface which is partly heated by water.

162. In the instance you have mentioned, is there any bad effect of effluvia from the iron?—No, none at all.

163. There would be no oil used about it?—No.

164. Supposing the air to be admitted at the rate you have mentioned, namely, at half a foot per second, would the draught and the current in that case be sensible to persons in the House?—Half a foot per second would scarcely move the most sensitive flame. I see no difficulty, however, in making the opening still larger, as over the floor of the House there would be an opportunity of making a larger area of opening if required.

165. If the air from your heating apparatus below and cold air could be introduced into an intermediate chamber in certain proportions and there mixed, do you think it could be done in a shorter time and to a greater degree of nicety than by the means you propose, and that you could have the command of the temperature of the air to be admitted?—It is my opinion that by such an apparatus as the one proposed, a more certain adjustment of temperature could be obtained with very much less trouble than by mixing in a separate chamber any small quantity of air with great excess of temperature, and to depend upon this being mixed with another portion of air uncertain in its temperature as to coldness.

166. Supposing the intermediate chamber to be thought advisable, do you see any reason why air could not be mixed as water in a bath to obtain the temperature desired?—That might be done no doubt, but it is my opinion that an adjustment of the heat applied to an extensive warming surface would be much more easy and certain in result.

167. There is nothing in the suggestions which have been made as to mixing air at all inconsistent with your mode?—Not at all.

168. You have stated that you allow your heated air to flow into a chamber immediately from the heated surface from the basement below, do you think you have that control over these heated surfaces as to alter the temperature readily, so that in ten minutes you could reduce it or increase it to the desired temperature?—I do indeed, because the surface itself is only acted upon violently by the effect of the water or steam underneath over the plate, while the upper surfaces, consisting of a great number of tubes which are fixed to and from a part of the plate, offer a very large surface, against which the air is made to flow, and the temperature of which it would be very easy to adjust.

169. Could you deliver in any drawing of your proposed plan, giving the proposed dimensions of the several principal parts of the apparatus?—Yes, I could.

170. Provided there is a basement story to resort to, could you not apply this apparatus to any building that is already constructed?—I consider it very difficult to form a communication between the lower part of the room and the roof—a necessary preparation for the discharge of the air from the House when, in order to warm it, the admitted air is required at a higher temperature than that contained in the House.

171. But provided there is a power of making flues externally?—Yes; this would, of course, give the means required.

172. Have you ever seen the present House of Commons?—Yes, I have.

173. Have you been in the chamber below?—I have.

174. Would there be any difficulty there of applying your apparatus?—I am not prepared to answer that question.

175. Do you see any reason why you could not do it?—It would be attended with a great deal of preparation, work, cutting the walls, &c., which would be all very difficult.

176. Of course it would occasion greater expense to allow the building to be made first, and to introduce your plan afterwards?—Yes.

177. Could you explain, in a few words, what would be necessary in the basement for your preparation?—Appropriating a part of the space of the basement under the centre of the House, and throughout almost the whole length of it, to the use of this apparatus, and inclosing that part of the basement which is under the floor of the House, so as to form a counter-ceiling to the basement generally.

178. What height would you require for your apparatus?—The more the better.

179. What is the least?—About ten feet.

180. Supposing it was necessary to ventilate the House of Lords as well as the House of Commons, could you arrange that ventilation on your system with only one channel for air?—Perfectly so.

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181. You would require a larger channel?—Certainly.

182. You would require a larger one, but with different branches?—Yes.

183. Now, in this warming of the Kentish Asylum, do you apply the same method with regard to the galleries as you do with regard to the sitting rooms and the sleeping rooms?—The sleeping rooms and the gallery are looked upon as one large room, admitting the air and taking it out.

184. That is to say, the cells are supplied with air from the gallery?—Exactly so.

185. Is there any distinction between the mode in which you warm or cool the galleries and the sleeping cells, and that by which you warm or cool the sitting rooms?—Not the least; the same stream of fresh air is allowed first to flow into the gallery, and then to escape through every sleeping room, so that there may be a current towards the sleeping rooms instead of from them.

186. Are the sitting rooms warmed in the same manner?—The gallery is the sitting room.

187. There is no separate sitting room?—No, only the gallery.

188. In that gallery the patients spend their time?—Such as are able to come out of their rooms.

189. And the ventilation or warming or cooling of the sleeping cells arises then from the admission of the air into those rooms in which they sit all day?—The admission of fresh air into the gallery.

190. At what temperature do they keep the galleries?—At 60° or 70°; 64° was the general temperature fixed upon.

191. Are there in general the same number of persons in the sitting room?—Pretty generally.

192. Not a great inequality of number?—No.

193. The great object there is to keep the temperature always up to a certain height?—That temperature in which persons could sit still and be warm.

194. Are those rooms very much crowded?—No; each gallery contains, may be, about 20 persons.

195. Then the great object, I suppose, is rather to keep up the temperature to a certain height than to reduce it below a certain height?—I should say, in that case, the incoming current would require, in the winter time, to have an excess of temperature over any of the air contained within the inclosure.

196. In the Kentish Asylum, is the change of air as rapid as you propose for the House of Commons?—No.

197. Therefore, in proposing a frequent change of air in the House of Commons, you have reference to the number of persons it is intended to contain?—Certainly.

198. Supposing you take a hollow pipe and heat the outer surface of it, and keep the outer surface of it to a temperature of 212°, can you state to what temperature you will raise, say 1,000 cubic feet of air passing through that pipe at any given rate?—I am not aware; it might be determined by experiments.

199. Is not such an experiment necessary in order to furnish data for your apparatus?—No, it would not, because I am aware of what these surfaces will do at present.

200. If you state you know what your apparatus will accomplish, will you state upon any given surface of metal heated constantly to the temperature of 212°, what quantity of air passed over the surface in any given time you can raise to any temperature?—It depends on the time it is in contact.

201. Therefore I introduce time as one of the elements?—Certainly; but the temperature of the surface is not 212°.

202. Assuming it to be so, if the surface is not 212°, assuming it to be constantly kept up?—I do not know that it would be constantly 212°; that would not be constantly the temperature of the surface, because I mentioned that the tubes were cast upon and formed part of the surface, and therefore conduct away a portion of the heat in a different position.

203. Should you have any difficulty in making such an experiment?—Certainly not.

204. If you were called before the Committee again, would you endeavour to make such an experiment; you understand it?—Yes, I would.

205. You give the interior surfaces of the pipes through which you carry the heat, and you would endeavour to keep the pipes, by a copious supply of steam, as nearly to 212° constantly as you can; then you pass a given quantity of air through

through it, stating the time at which it is passed, and let us know the temperature at which the air is raised ?—These are the conditions of the experiment. *Mr. J. Sylvester.* 7 August 1835.

206. Do you propose to make any arrangements for securing the purity or cleanliness of the fresh air you would introduce ?—I think it would be extremely desirable to have a communication with some large inclosure for the fresh air.

207. What do you mean by an inclosure ?—A large building between the House of Commons and the outer air, that the air might be admitted into this large inclosure and allowed to settle and deposit.

208. Such a building as Westminster Hall for instance ?—That would be an excellent place. The London atmosphere contains a great quantity of blacks or smuts from the chimneys.

209. Would you pass it through a wire grating or any thing else ?—That would be difficult; but if we could admit it into a large inclosure like that, it would there lose its velocity so much that it would have time to settle and allow any foreign matters to deposit, just as water deposits on being admitted into a large cistern.

210. Like a feeder or receiver ?—Yes.

211. Suppose then you were to make that the channel of communication, Westminster Hall ?—Yes; suppose we admit it through the Hall, and then take it from the Hall again, admitting it at the floor and taking it through the floor again.

212. Do you require any preparation in the roof for your apparatus, I mean architecturally speaking ?—Nothing but the inclosures and cap, which will direct the opening and the discharge of air from the wind.

213. It would be no expense then ?—No; and this might be decorated on its exterior so as to have the appearance of a lantern.

214. Do you think that, in the buildings which are proposed to be erected for the Houses of Parliament, so far as regards the two chambers appropriated for the sitting of Parliament, that the exterior walls should be built hollow, I mean with reference to ventilation and command of temperature ?—It is my opinion that the inclosing walls of the building should be insulated as much as possible from the effect of the changes of temperature belonging to the outer air. To do this it would be desirable to form hollow walls, to provide some sheathing to prevent the changes going on in the outer air from operating upon the inclosure or building.

215. And you think therefore, referring to the evidence you have before given as to the mode of ventilation, that you yourself would prefer that, and that it would facilitate the object you have ?—It would secure that condition perfectly.

216. Might you not introduce the cold air down that as a chamber ?—It would be desirable to have the air in that altered as little as possible in temperature throughout any portion of the year, not to introduce cold or warm, because that would have in some degree the effect the double wall is intended to counteract.

217. Then you speak at present with reference to the space which is to be between the walls, merely with reference to the exclusion of the effect that changes of temperature in the outward air would have upon the interior of the building? —Yes; preventing the changes in temperature to which the outer walls would be subjected from acting upon the interior of the building, which would be desired to vary as little as possible over any part of the year.

218. But it might also perhaps be advantageous for alteration in ventilation hereafter, if any alteration was found necessary it would save any damage to the exterior walls ?—It would be a very useful provision in securing any good arrangement for ventilation.

219. Could you not manage to carry the warm air and introduce it to all parts of the House through those pipes from your warm air chamber below ?—We should not then allow the air to be admitted so as to diffuse itself through the whole of the interior, when the air admitted is of a higher temperature than the air in any part of the inclosure.

Michael Faraday, Esq., F. R. S., Professor of Chemistry at the Royal Institution, called in; and Examined.

220. HAVE you ever turned your attention, Mr. Faraday, to the subject of ventilating and warming large buildings; and could you furnish this Committee with any general information on the subject, so as to assist their inquiry ?—I have only considered the subject very generally, never in a particular case, except that of our own lecture-room, and the information I can give is theoretical rather than practical; *M. Faraday*, Esq. F.R.S.

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practical; I should be happy to answer any questions that may lead to any matters I can illustrate here.

221. Will you inform the Committee what means you have adopted with respect to the ventilation of the lecture-room of which you speak?—On considering the subject, we found it extremely difficult to apply to our room, which will hold about 800 persons, a satisfactory system of ventilation; no arrangement of the present air passages, or the present mode of heating, has enabled us to give that free and proper draught through the room which shall sufficiently move away bad air and give good without involving violent partial currents, and it is that result which makes me speak with the caution I do in answering such of your questions as regards practical points.

222. Have any experiments been made at the Royal Institution on the ventilation of the lecture-room?—Not otherwise than by the use of Perkins' mode of supplying hot air for the purpose of ventilating and warming, in conjunction with the capabilities the building afforded.

223. Was the air warmed at the basement, and allowed to flow into the rooms?—It was.

224. And then to escape through the roof?—It entered into the room at an altitude of about 25 feet above the furnace, and then through the roof or windows at about 30 feet more above the delivery into the lecture-room, our room being on the first floor.

225. Then the air was directly warmed by heating surfaces below the room, and rose only by rarefaction and escaped through the roof?—Yes; except that we had the power of opening and closing the passages to different degrees, so as to retard or facilitate the passage of the air into and through the room.

226. Did you consider your plan successful?—We found that very partial draughts continually occurred, although the warming apparatus was a powerful one and the tubes very large, 24 inches in diameter; still it gave partial draughts, and these depended much upon the difficulty of quickly mixing air of different temperatures without special means for the purpose.

227. Was there any means adopted for regulating the current of admitted air?—There is a valve across the channel by which the air finds entrance, and which, limiting the quantity of air, in that way limits the supply of heat; but I think the arrangement in that form a bad one for the proposed Houses of Parliament, and that you ought to have the full command of temperature without depending on the admission of a given quantity of air; and also of any quantity of air without being restricted by temperature.

228. Do you think that temperature can be sufficiently under command, if the heated air with which the chamber is supplied enters immediately from the stove?—I cannot answer the question practically.

229. Do you think, either theoretically or practically, there would be any difficulty in having a chamber for the reception of hot and cold air, or two currents of air at known temperatures, so that they might be mixed like water in a bath and produce a body of air of a uniform average temperature for the supply of the chamber or building to be ventilated and warmed?—I think there would be no difficulty.

230. Do you think that the temperature would be by such means more under command?—I think the question is quite a practical one, and I am afraid to give any answer on it without some practical knowledge of the matter; it would require especial care in mixing the air. Airs do not mix so suddenly as is generally supposed, although they inevitably mix if time be allowed.

231. On the supposition that it was possible to mix two bodies of air of different temperatures quickly, so as to produce a body of air of a tolerably even temperature, do you think it could be accomplished by simple mechanical means?—There can be no difficulty in making a mixture readily by mechanical means or arrangements.

232. Supposing then such a plan to be practicable, do you not think that temperature would be more under command than when the warm air is allowed to rise immediately from the heated surfaces into the room?—I do.

233. With regard to the apertures for the admission of warm air, should they be, in your opinion, numerous, or should they be few?—I should prefer numerous apertures; I should prefer apertures approaching as nearly as might be to a grating.

234. And so distributed over the whole floor?—Yes, so as to have as little difference between different places as might be.

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235. So that the floor might be, as it were, allowed to breathe or emit the air?—That I take to be the perfection of the system, as having one single aperture would be the worst state of it.

236. With regard to the source from whence you would take your supply of air, would you advise its being taken from the basement of the building, that being supplied from the immediately surrounding air, or would you advise taking your supply at some height from the ground?—That would depend entirely on circumstances; but, wherever taken from, it is quite essential that you should have a free supply of air to the warming apparatus or chamber of mixture to have ventilation of the room; it must entirely depend upon local circumstances whether you take air from a distance or near at hand, and, amongst other things, it would importantly depend on the relative sweetness of the neighbourhood. Whether it should come from this part or that would depend on the sweetness or condition of the places of supply; thus, at the basement of the building the air might be in a very bad condition as regarded neighbouring sewers and sources of odours, although very well with regard to the quantity which could be conveniently obtained.

237. But in reference to the source of supply, all other things being the same, you would take your supply indifferently from a high or low level?—If all other things were the same, I should think it would be quite a matter of indifference.

238. Suppose the supply for the two Houses to be drawn from the inclosure near St. Margaret's church, would you prefer, in that situation, taking it from the surface, or some height from the ground?—I do not think that thirty or fifty feet from the surface would be at all better than the ground itself.

239. Supposing you had the means of taking your supply of air from a considerable height, would you prefer that to drawing it from the surface?—If you could rise decidedly above the chimney-tops, I should prefer that to any lower situation.

240. With regard to the river, would it be advantageous or disadvantageous, if you drew your supply from thence?—I am not sufficiently acquainted with the banks of the river and the state of them at different times of tide to say whether I should recommend it or not; it would depend on the character of the uncovered surface at low water and the effluvia from it; and these, I think, would be against the air being taken from that spot.

241. Do you not consider the tide an advantage as regards the change or supply of the air?—Certainly.

242. But the effluvia of the uncovered mud is objectionable?—Yes.

243. The uncovered mud would render it so doubtful that you would prefer taking it from another source?—That is my impression.

244. Then, unless you could draw your supply from a height above the chimneys, you do not think it is of much importance whether it is taken above the level of the ground or not?—No.

245. Have you ever turned your attention to the chemical effect produced upon a body of air in a chamber crowded for many hours?—I have often considered the effect, desiring to know what the particular change was, but I have never satisfied my own mind of the full cause of the sensation produced.

246. Are there any means of ascertaining that chemically from time to time, or not?—I am afraid not; I think it depends, in part, on circumstances beyond the present reach of chemistry; I think it depends as much or more on matters communicated to the air by the living system as on any direct injury to the air due to the deficiency of oxygen or presence of carbonic acid, or the increase of temperature which a large collection of persons produces.

247. So that it would be always advisable rather to take the air from the atmosphere in its natural state, and simply treat it with reference to temperature, than to think of improving artificially or compounding an atmosphere?—I am quite of that opinion, if by compounding you mean endeavouring to restore a used atmosphere to its first state, or to its agreeable state.

248. Your opinion is, that it is not desirable to attempt to restore a vitiated atmosphere, by the artificial introduction of oxygen for instance, but rather to rely entirely on the free external atmospheric air?—Most decidedly, better to draw on the free atmospheric air.

249. And not to attempt to repair or restore its lost qualities?—I do not think you could restore a vitiated atmosphere to its former state by the present known means of chemistry; you could restore the oxygen, but you could not take away the deleterious matter which has been communicated to it.

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250. Supposing the tower of Westminster Abbey could be made available for supplying the basement of the House of Lords or House of Commons with fresh air, what would you say to taking the supply from thence rather than nearer the surface of the ground?—Considering the situation of the Abbey with regard to the prevalent winds of the metropolis, I think it would be very desirable, provided it could be done without inconvenience, on other accounts; and I think it is worth considering whether, on account of the communication between the body of the Abbey and its tower, and the general temperature of the building, you might not even call with advantage on the Abbey itself as containing air preferable to that on the exterior.

251. Do you mean that partly in reference to what Mr. Sylvester said on the advantage of allowing air to settle in some large building before it was admitted?—That would be included; but I am referring to the possibility of a downward draught from the tower of the Abbey, which might supply the air from above the body of the Abbey.

252. Do you agree with Mr. Sylvester on the importance of allowing the air to settle in some large building, to free it from impurities before it is used?—I am hardly aware whether there exists so much of the black particles from the chimneys in the air about the Houses of Parliament as to make that a matter of importance or not. I think it would as soon settle or be caught in a very long channel as in a short large chamber.

253. Can you give the Committee any information as to the quantity of air vitiated by an individual, as well by breathing as by exhalations from the body?—I have no satisfactory results upon that subject, and am a good deal puzzled to guess what ought to be the minimum supply allowed for each person of a great number. A man destroys about a gallon of air per minute; but I think he ought to have 10 or 20 times that quantity to keep the air in a healthy and fit condition. I am obliged to give the answer thus generally, not having any actual results.

254. Is there any general information that you can give the Committee to assist them in the object of their inquiry?—I am afraid not, not having had occasion to consider the subject practically; my answers must be very general, and consist of theoretical opinions or even mere speculation, rather than really useful information.

255. With regard to your own lecture room, which you say contains about 800 persons, is that the general number it contains, or is it liable to great fluctuation?—It varies from 50 to 800.

256. Beginning sometimes at 50 and gradually increasing up to a large amount?—Sometimes a meeting of 50 for half an hour or more, and sometimes a meeting of 800 for an hour and a half; at one time in the day, at another at night.

257. In short, it fluctuates very much, as the numbers of the Houses of Parliament?—It does, and the great difficulty in ventilation, and which makes all my anxiety in giving answers, is that you have to adjust the supply of air to 600 or 700 persons at one time, and perhaps to only 20 or 30 at another time, the members having a right to expect to find the room equally comfortable under these very dissimilar circumstances.

258. Therefore the ventilation of a room so circumstanced must necesarily be very different from that where the average number of persons is the same?—Yes.

259. You have another difficulty, that is, on account of the draughts; if you could ventilate it, still you are subject to those draughts?—In our room we are.

260. Is there any way you could devise of preventing those draughts?—I think it is very possible that a system of warming and ventilation might be adopted in which every element, so to speak of ventilation, might be at command, and in which the draughts would of course be avoided.

261. In what way? by making the atmosphere within the walls heavier than that without?—It would include many expedients to meet the varying circumstances; thus it would have to provide in the first place a sufficient force of draught or current through the room, whether there were human beings there assisting to raise its temperature or not, the force being governable, so as not to be too strong in the former case or too weak in the latter, and so for each variable circumstance.

262. Can such a system be produced?—I have no doubt of it; I have no doubt practically you might have an arrangement that would answer every purpose; which would give you the power of admitting a supply of air sufficient for the whole, with or without the communication at the same time of warmth; a supply of air sufficient for a few or the many, with equal ease and command over the temperature, and without draughts, which shall at the same time give such a command over the forces causing the current as can be changed at pleasure with the numbers

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in the House, and in fact place every other point of ventilation under command; but I do not pretend to the invention of such a system.

263. Then you might have a delightful atmosphere always kept up, provided you went to an adequate expense?—Yes, and succeeded in obtaining a good plan; and I should say the Houses of Parliament ought to go to that expense. I think that ventilation and warming are so important with regard to an assembly of such a nature, that a full and efficient system ought to be adopted.

264. Can you point out to the Committee any building in which this sort of arrangement has been attempted?—I do not know of a single building which I could quote as a case which should satisfactorily meet the present inquiry.

265. Referring to the evidence given by Mr. Sylvester, do you consider the arrangement he proposes good?—I am not prepared to give an opinion on that point; I could not venture to do so without first examining some practical application in which his principles are already in action.

266. With regard to the supply of air warmed by heated metal surfaces, would or would there not be a liability to the supply being dry, and thence unpleasant?—Yes, I think there would be much risk of the effect called dryness, if the surfaces were highly heated; and I should therefore prefer a tempered source of heat.

267. Do you speak of metal surfaces heated to a great heat by fire, or heated to a moderate heat by hot water or steam?—I should, for the reason above mentioned, prefer the latter modes of heating.

268. You think, from the latter modes, there would be less danger of the air being heated to a great temperature?—I am of that opinion.

269. What do you think should be the temperature of the air when admitted?—That must vary with the temperature of the room, the time of year and other circumstances.

270. Assuming some given temperature out of doors?—It will also depend more or less upon the condition, whether you warm the House with such air, or have extra means of producing the necessary temperature; whether this ventilating system is to be a warming system also, and to what extent.

271. Assuming the ventilating to be combined with the warming of the House, what should you say?—The question is so complicated in its conditions, and these must vary so much at different times of the year, and with different numbers of persons, that I think no one temperature could be assigned as most proper.

272. At what temperature would you advise the atmosphere of the House to be?—I should think that an atmosphere of 60° or 65° would be quite sufficient.

273. You do not think that would be too high?—It would depend greatly on the number of persons. It is a very complicated question. With a few persons, certainly not. A multitude might feel the air oppressive, and yet the thermometer give the same indication.

274. Can the sensations of individuals in crowded apartments be accurately ascertained by the thermometer?—I think that an individual may find a decided difference in his feelings when making part of a large company, from what he does when one of a small number of persons, and yet the thermometer give the same indication.

275. Will you give the grounds of your being of that opinion?—When I am one of a large number of persons, I feel an oppressive sensation of closeness, notwithstanding the temperature may be about 60° or 65°, which I do not feel in a small company at the same temperature, and which I cannot refer altogether to the absorption of oxygen, or the evolution of carbonic acid, and probably depends upon effluvia from the many present; but with me it is much diminished by a lowering of the temperature, and the sensations become more like those occurring in a small company.

276. It might arise then in one part of an apartment which should be more crowded than another?—Yes.

277. Including in one apartment the condition of a small and large number?—Exactly so. Air feels unpleasant in the breathing cavities, including the mouth and nostrils, not merely from the absence of oxygen, the presence of carbonic acid, or the elevation of temperature, but from other causes depending on matters which are communicated to it by the human being.

278. Would not those effects be removed by an effectual system of ventilation?—Certainly, the object of a good system of ventilation is to remove the effects of such air.

279. Supposing the admitted air to be at a temperature of 65°, do you suppose

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suppose there would be any loss of humidity, so as to require any artificial means to supply it, when the thermometer externally indicates a low degree of cold?—I do not see any reason to imagine that air raised to 65° will have lost any of its humidity, if heated carefully by hot water or steam.

280. But assuming the air to be heated by metallic surfaces, by the direct agency of fire, would you at all modify your answer?—I cannot say that the air has lost its water; but I know by experience, that whether it be the air of summer or winter, when heated to a high degree by metallic or other surfaces, as by Perkins' stoves, it requires the vapour of water to be communicated to it.

281. You think that arises then not so much from the mode in which heat is conveyed into the air, as from some chemical change with which we are yet unacquainted?—I am not at present aware what is the cause of the peculiar feeling produced by air which has been much heated, or why the vapour of water in a great measure corrects it.

282. In considering that our information on the subject of ventilating and warming is very imperfect at present, what would be your opinion as to the propriety of making some experiments upon the present Houses of Parliament, in order to obtain some data for the future?—I think it very important that observations and experiments should be made upon some already arranged system for the purpose of ascertaining the effects, under all circumstances, as far as may be, that from them may be deduced the data on which a better system of ventilation may be founded.

283. Whether with reference to the health of individuals, or really in reference to the interests of science?—On both accounts.

284. Could these experiments be made satisfactorily during the sitting of Parliament?—I think they ought to include observations made both when the House is full and when nearly empty; in hot weather and in cold weather, including observations on the temperature, quality and quantity of air that passes in and also of that which passes out.

285. Could you suggest any plan for conducting such experiments?—I have no knowledge of the present Houses or their state, and the proposed experiments would require some consideration; but a man of judgment and observation, uniting some knowledge of architecture and construction with an acquaintance with natural principles, would soon be able to decide upon the points to be ascertained.

286. What points do you consider necessary first to be ascertained?—I cannot at once pretend to enumerate them all, but such as these: the quantity of air entering; the temperature of the air; the temperature in the room above; the dryness of the air; its chemical condition, and especially the sensation of the Members generally, as far as that could be obtained in an unprejudiced manner; that would be a great point.

287. And the temperature of the room below it?—Yes; also the external temperature; the state of the barometer; the direction of the wind; the number of persons present; the quantity of lights, with their position; and, if possible, the quantity of heat communicated to the air within the room by them and by the persons present, after it had left the warming apparatus.

288. Now, with regard to those various points, is it not also of importance to be aware to what extent the atmospheric air is excluded, as well by the thickness of the walls of the building as by the materials of which they are composed?—I am not aware of the present arrangement of the House.

289. Do you not conceive that there would be a great deal of difference in the results arising from the difference of the materials of the walls, which, of course, tend to exclude the influence of the atmospheric air by their not being porous, by either exposure to outward air, or to the influence of the sun and so forth, all which must be taken into the account before you can come to a fair judgment of what the experiment would produce?—All such points ought to be carefully noted.

290. Do you think it desirable to have the walls in this new building very thick, provided you put all apparatus out of the question; would it not give a more equal temperature, summer and winter?—Probably it might, but on other accounts I am not quite sure whether it would not be better to have the walls porous rather than impenetrable to air.

291. In constructing the building, suppose it consisted of two walls, one within the other, could that space be used for conducting cold air or a warm air—the space between the two?—If the walls were porous in any degree, it might be very importantly used.

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292. In the building in question, we have not only to consider ventilation and warming, but we have also to consider hearing?—Yes.

293. Have you any information you can give the Committee with reference to the formation of a chamber which shall combine perfect ventilation and comfortable warmth with good hearing qualities?—No; I have not sufficient practical knowledge to enable me to give a distinct answer to the question.

294. Are there any authorities on such subjects, practical or theoretical, to which you can refer the Committee?—I have no doubt there are several useful authorities, but cannot at once refer the Committee to them.

295. I think the theatre of the Royal Institution is constructed very favourable for hearing a single speaker?—Perfect almost for a single speaker.

296. Was that constructed on acoustic principles or not?—I am not sure, but probably it was, for Mr. Webster was the architect, but it is perfect as regards a single speaker, and though often referred to preparatory to the construction of other theatres in London and elsewhere, none equal it in the facility with which the speaker is heard.

297. Have they erected theatres precisely similar?—No; the design has been more or less altered. I have been in some of the rooms so constructed, and spoke there, but none are equal to ours.

298. I believe the theatre of the Royal Institution is exceedingly small for the number of persons they press into it?—It is a building, the plan of which is rather more than a semicircle, and it is 60 feet from side to side and 44 feet from back to front. It has a large gallery.

299. Are the walls very thick and very hard?—No; not particularly so.

300. Are they lined with any thing that is extremely hard?—No; the walls are ordinary walls, and the theatre is constructed within them, in many places we pass between the theatre and the walls. The former is wood all round.

301. And brick?—The wood touches the brick. The whole consists of a square space inclosed by brick walls, within which the theatre nearly semicircular is constructed.

302. Of what wood?—All fir.

303. Have you ever heard persons who have spoken in different parts of the theatre state it was also a good room for speaking in?—I do not remember to have noticed that when more than 50 people have been present. I think that number is hardly a sufficient criterion of the power of the room to allow the voice in different parts to be heard.

304. Do you think it would be desirable, previous to settling any plan of ventilation or warming, that competent persons should be appointed to make experiments and observations on the subject of ventilation?—My opinion is, that experiments are required on the subject; that we want some numerical data, something more than general impressions or mere opinions, and which is all that my answers pretend to be with regard to ventilation.

305. But could that be obtained without some disinterested and competent person being employed to make observations, free from any interest in any particular plan of ventilation?—If you could induce a disinterested architect, who is at the same time acquainted with the scientific principles of the subject, to undertake the investigation, it might be a great advantage to the Committee; but I think a philosopher having no knowledge of the construction of a building, or an architect unacquainted with the necessary branches of natural philosophy, might fail in giving you the information required. It should be a person who is generally acquainted with all the bearings of the subject upon that scale required for the Houses of Parliament.

306. Inasmuch as few architects are much informed on the subject of ventilating and warming large public buildings, would it not be desirable to combine with the architect some scientific man in order to obtain the best results?—It may be so; but that I think is a question best left to the judgment of the Committee.

Mercurii, 12° die Augusti, 1835.

BENJAMIN HAWES, ESQUIRE, IN THE CHAIR.

William Thomas Brande, Esq., F.R.S., &c., called in; and Examined.

W. T. Brande, Esq. F.R.S.

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307. HAVE you ever turned your attention to the subject of the ventilating and warming of large public buildings?—Yes; I have occasionally.

308. Can you give this Committee any general information on that subject?—I think there are two essential points in effecting good ventilation, which especially deserve the attention of this Committee, the one, that of insuring a free escape of warm and foul air from above; and the other, the admission of a due quantity of fresh air from below to compensate for that which is withdrawn.

309. By what means do you propose to create the necessary current for producing that change of air?—The method, which is perhaps most generally and conveniently applicable, consists in having what may be termed a chamber of warm air between the ceiling and the roof of the building to be ventilated. For this purpose warm air should be sent into the roof by one or more flues connected with an air stove in the lower story, and this heated and foul air should have free egress from the roof by a cowl turning from the wind.

310. In order to produce an ascending current?—With the view to create an ascending current, so that, by proper means, a demand may be made, if requisite, upon any particular apartment, or at all events, upon the hall or large room below, so as to carry off its foul air from or near the ceiling.

311. But with reference to the supply of the fresh air, would it not also be necessary to adopt some means to create an ascending current from the source of supply into the chamber to be ventilated?—Certainly.

312. And would you for this purpose also apply heat, as well for ventilating as for warming?—No; I think that the ventilation, properly so called, and the warming, ought to be considered distinctly. In regard to ventilation, the great point is to carry off the foul air, which I think is most efficiently done from or near the ceiling, and to do it in such a way as to guard against all possibility of descending currents of cold air.

313. Do you think it advisable that the ventilating and warming should be distinct?—In the case before us, they appear to me to require separate consideration.

314. But with reference to buildings, such as those proposed to be erected for the Houses of Parliament; do you think it would be possible to ventilate and to warm without making the two processes, in point of fact, one and the same?—Undoubtedly; and my object in considering them separately is to avoid attempting too much by one stove, or by one means, which I think, in undertakings upon a large scale, has often been a source of failure. The admission of fresh air ought to be from below, and I think there should be a chamber expressly appropriated to the purpose of admitting fresh air, be it hot or cold, in some lower part of the building, and that the whole of the space under the floor of the House should be accessible.

315. Have you ever turned your attention to the necessary supply of air in reference to an apartment of a given size, taking into account the number of persons and the consumption of air by illumination?—Yes, I have; but generally speaking, such calculations are not very important in their practical bearing on this subject, inasmuch as one must, in practice, go so far beyond that which is theoretically requisite, in all that relates to ventilation.

316. But with regard to the construction of the apparatus for the supply of air, would it not be necessary to have some reference to the supposed quantity required, both in reference to the size of the apartment and the number of persons present, and therefore would it not be advisable to refer to some established theories, if there be any, on the subject?—That kind of information might be occasionally useful, but any calculation of the quantity of air consumed by an individual in breathing, in the course of a given time, or by a candle in burning, scarcely bears importantly on a question of such magnitude as that before us: the object is to effect a thorough and complete ventilation of a room or hall calculated to hold seven or eight hundred persons, sometimes full and sometimes comparatively empty, not only used by daylight but also at night, when artificial light is required, and to make the atmosphere

atmosphere at all times as comfortable as possible to the persons who are to breathe it, both as to purity and temperature.

317. You think the supply required is so far beyond any thing like an approximation to actual consumption, that it is scarcely worth while to refer to calculation on the subject?—Exactly so; we must be guided by practice rather than theory.

318. Can you at all assist the Committee by any practical experience you may have gained, either as to the best plan for warming or ventilating?—I think that, in reference to warming, a principal object should be to throw in a large quantity of air very moderately heated, instead of a small quantity highly heated.

319. At what temperature would you introduce it?—At a temperature, in winter, with the external atmosphere, at about 32°, not if possible exceeding 85° or 90°.

320. And in summer time when the thermometer would range from 65° to 80°?—I should then put the heating process out of the question, and admit fresh air from without.

321. Would you adopt any means for supplying air at a temperature something lower than that out of doors?—If it could be conveniently effected, it might occasionally be desirable; but it would be a very difficult thing to accomplish. For this purpose, however, air might be brought from a distance through a subterranean tunnel, and then it would not only be somewhat cooled in summer but also warmed in winter.

322. Then as to the admission of the air itself into the apartment, where would you introduce it, and in reference to the apertures of admission, what number would you propose, and how would you distribute them?—That is a question which will depend very much on the size and the form of the room generally, and upon the position of its windows and doors, and it is one which I am aware has been very much agitated and on which there is a great variety of opinions; as far as my own experience goes, the fresh air should be admitted near the floor or from the floor; but where the arrangement of the room is such that the persons in it are at very different levels, it might be expedient to admit it in other places.

323. Would you admit it through few or through a large number of apertures divided over the area of the floor; would you, in point of fact, have few apertures, or would you allow the floor as it were to breathe its supply of fresh air by having so many apertures as to prevent any perceptible currents?—The inconvenience of having a great number of apertures sprinkled over the whole floor is generally so considerable as not to compensate for any advantage which might result from it. The better way is to have a sufficient number of tolerably large openings, so constructed as to disperse the air; and if the air that enters is only moderately heated, such openings create but little inconvenience. At the same time I see no difficulty in throwing in warm air or fresh air through a long line of apertures in the space underneath the seats, and allowing it to escape thence by any number of convenient openings; at all events the space underneath the seats should be accessible, and not only ventilated but lighted and kept clean.

324. In the case of admitting air by few apertures, would you not probably produce unpleasant draughts, whilst by increasing the number of apertures, would you not to the same extent diminish the inconvenience of draughts?—I think not.

325. Over the floor of a room which we will assume is 70 feet by 40, an oblong room, and assuming that to be the size of the existing temporary House of Commons, what number of apertures would you introduce in the floor, and how would you distribute them?—I have assumed the room to be semicircular, or semi-elliptical, and that there is a certain free space in the centre; in such a case I should admit the great bulk of the air by one large aperture, or rather cluster of apertures, in the centre of the floor and by other apertures towards the sides of the room, either in the wall or floor.

326. Should not that, however, be the shape of the future Houses of Parliament, would you make any material alteration in that recommendation?—In that case I should probably admit the air either from beneath the seats, or by apertures in the floor, as far as possible equidistant from each other and from the sides of the room.

327. In fact, near the centre?—Yes, near the centre of the room; in a central line.

328. You propose to admit the supply of fresh air in the centre of the room, where no persons are supposed to be immediately placed?—Yes.

329. But how would you ensure the distribution of fresh air laterally, for instance, under the galleries?—By the admission of a large quantity of air not overheated, and by the form or construction of the openings through which it is admitted; if,

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as is generally the case, the air is sent directly upwards through a small aperture, or through one of moderate size only, and very much heated, the tendency then is to establish a strong current, which immediately rises towards the ceiling and does not readily mix with the air in the sides of the house; but if the air is admitted through a large aperture, and very moderately heated, it then has a much greater tendency to diffuse itself and mix generally with the mass of the air in the room. In this case the difference of specific gravity between the warm and cool air is comparatively small; in the former it is enormous. Much may also be effected in duly diffusing the warm air, by appropriately constructing the channels by which it enters.

330. It ought, however, to be the condition of a good plan of ventilation that the fresh air should as a matter of certainty be equally distributed throughout the room; do you think by the plan you propose that that would with certainty be accomplished?—I think it would be very sufficiently diffused.

331. Assuming the shape of the present House of Commons, which is an oblong, of the dimensions stated, do you think the Members sitting under the galleries would be sure of having their fair portion of fresh air, compared with the Members sitting on the floor?—I am afraid not; and, indeed, in a room so constructed, with a deep gallery projecting around it, and both it and the area filled with people, thorough ventilation is almost an impossibility.

332. Are the Committee to understand that you conceive a gallery to be in itself a great obstruction to good ventilation?—Undoubtedly.

333. Do you think it an insuperable obstacle?—A gallery upon the common construction, protruding into the room, is a serious obstruction to good and satisfactory ventilation and warming; but a very lofty gallery, that is, very much above the seats below, and not too deep or projecting too far from the walls, might be admissible; but upon the whole, I would, if possible, avoid a gallery.

334. Assuming there to be apertures in the floor of the gallery, allowing the currents of air to pass freely, do you think it then so great an obstacle that in the construction of a new House it ought rather to be avoided, and that seats in the body of the House ought to be furnished for the Members?—I think in the construction of a new House that a projecting gallery, if possible, ought to be avoided; and that if a substitute for a gallery is necessary, it might be a species of corridor on a level with the passage surrounding the uppermost tier of seats, or a kind of retreating gallery, so that the air and the space within the house may be perfectly free and open.

335. At what rate would you propose, through the large apertures that you have described, to admit the current of supplied air to enter the House?—I cannot answer that question accurately without referring to notes, and indeed, the velocity with which the air enters by the kind of apertures which I have described is liable to such constant fluctuation, depending not only upon the relative temperature of the warm and cold air, but upon the accidental opening and shutting of doors and windows in and about the House, as almost to preclude the practical application of any calculations upon the subject. My great object in recommending large apertures and the admission of much air at a moderate temperature, is to avoid inconvenient currents of hot and cold air taking place in the body of the House.

336. Recommending, as you do, few apertures for a room to contain, on some occasions, 600 Members, as well as strangers, do you think it would be possible to avoid such rapid currents as would be productive of the inconvenience of draughts?—In a lofty semicircular or semielliptical room, without a gallery, and with a coved or dome-shaped ceiling surmounted by a lantern, I presume there would be little difficulty upon that point.

337. The room that you speak of nearly describes the theatre of the Royal Institution, does it not?—Nearly so; but that room has a gallery and a large flat ceiling, which are impediments to warming and ventilating it; and I also conclude that the Houses of Lords and Commons would be larger than that theatre, and so constructed as to include its merits and reject its faults.

338. Have any efforts been made to ventilate and warm that theatre?—Several.

339. Could you furnish the Committee with any of the results of those experiments?—The room was originally heated by a thin copper steam-pipe of about one foot diameter, passing round under the seats, and the air warmed by it was admitted from the hollow space underneath by a great number of holes bored in the front of

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some of the seats, and by six large apertures, on each side of the four entrances. But in very cold weather the temperature of the room was scarcely high enough, especially with a thin audience, and when the steam was not fully kept up, there were awkward draughts and currents; the admission and condensation of the steam also often produced disagreeable noises and cracking of the pipes, and it was very difficult to keep them perfectly tight; so that, in consequence of these and other difficulties, the plan of warming the room by steam-pipes was ultimately given up. The method which is now adopted, and which, with certain modifications, might answer tolerably well, is that of throwing a current of heated air into the centre of the room.

340. Do you find that both warm and fresh air is distributed equally throughout the theatre?—Upon the whole it does so, as satisfactorily as one could expect.

341. Have you any provision for allowing a current of air to pass from under the gallery upwards to the roof?—There are provisions for that purpose, but they are not very effectual; so that when the room is crowded and the doors closed, the space under the gallery is apt to be disagreeably close.

342. Should you be able to furnish the Committee, on referring to your notes or papers, with the rate at which the current of warm air enters the theatre?—Certainly; but as neither the velocity of the current nor the temperature of the air are, from the causes I have already adverted to, constant, such calculations are, practically speaking, apt to be very incorrect.

243. Have you ever heard complaints of a draught from those who were sitting on the lower benches on the floor of the theatre of the Royal Institution?—Yes, I have; but I principally attribute that to the air being in the first place frequently overheated, and to the manner by which it enters the room, which is by a vertical opening in front of the table, so that it is projected on the persons who sit immediately opposite to it.

344. The air then enters the theatre, not directly from the floor, but by a current parallel to the floor?—By a current projected nearly parallel to the floor from an aperture at a right angle to the floor and in front of the lecture table. I have frequently sat in different parts of the theatre to examine the effect, and though on the front benches when the stove is in full work, I have perceived a current, I think it can hardly be considered as a disagreeable one, or as any serious objection to the general plan of warming. It might certainly be got rid of by a better mode of sending in the warm air. There is another source of draughts and currents in that room, from the corridor communicating with the entrances to the theatre, which is not warmed, and which acts as a chamber of cold air, delivering its contents into the theatre whenever the doors are opened.* I mention this in reference to the new Houses of Parliament, the corridors, lobbies and ante-rooms of which ought to be as perfectly warmed and ventilated as the body of the Houses.

* The warming of this theatre is now undergoing improvements, with a view to obviate these objections. (Sept. 21, 1835.)

345. The parties who sit in the theatre of the Royal Institution are not in the habit of retaining their seats so long as the Members of the House of Commons, therefore what might be an inconvenience to the one would be no inconvenience to the other; in the admission, therefore, of fresh air to the Houses of Parliament, do you not think that it is indispensable that it should be done without there being any inconvenience arising from the current?—Certainly; in regard to the House of Commons, I would admit more air and at a lower temperature than is admitted into the theatre of the Royal Institution; I would warm the air by a differently constructed stove, and throw it in by different apertures.

346. From whence is the supply of fresh air taken for the theatre of the Royal Institution?—From an apartment in the basement story, immediately open to the back yard.

347. Do you conceive it desirable to take the supply of air from the basement story or a spot not perfectly open to the winds?—The more open the place is from whence the air is obtained for these purposes the better; but I do not conceive it so essential a point as to justify the incurring any considerable difficulties or expense; it might otherwise, as I have already said, be brought from any distance by a tunnel, or be made to descend from above by a lofty turret.

348. You are aware that Mr. Tredgold, in his work on ventilation, recommends that if possible the level from whence the supply is taken should be as far as possible open to the free currents of the atmosphere, with a view at all times to obtain a pure supply; supposing that were practicable, do you think it would be desirable?—Certainly.

349. Supposing the warm air introduced, or the cold air introduced into a chamber

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ber before it comes into the House, would that prevent the inconvenience of draughts which you say you sometimes feel in the theatre of the Royal Institution?—In any new building about to be erected, I think that a chamber in the lower part of the House ought to be exclusively appropriated to the arrangements for heating and ventilation, and that those highly important matters ought not to be made a secondary object or an after consideration with the builder or architect, as is too frequently the case.

350. Do you think it would be possible in a chamber under the principal room to be ventilated, to introduce supplies of air at different temperatures, and to mix them, and thus obtain a body of air of a uniform temperature?—I see no theoretical objection to it; but there would be many practical difficulties in the way.

351. But which expense might be overcome?—Some of which might possibly be overcome.

352. What practical difficulties are most prominent in your mind?—The difficulty of insuring a uniformity of temperature in such a mass of air; or, in other words, of equally mixing large quantities of hot and cold air, so as to attain a mean temperature.

353. Supposing it were possible to force into this chamber 40 cubic feet of air at 40 degrees, and 40 more at 80 degrees, and there were mechanical means for mixing it, do you think the mean temperature would not be obtained with tolerable certainty?—The difficulty would lie in mixing those portions of air; or, at least, in so doing it, as to be practically applicable to the scale required for the new Houses of Parliament.

354. You think that could not be overcome by mechanical means?—It might be overcome.

355. But with mechanical means, both inexpensive and simple?—It might possibly be overcome; but I think there would be enormous practical difficulties in the way of so effecting it as to be applicable to the purpose now before us.

356. Do not you think warm air to the heat required would be a more simple mode of obtaining the proper temperature than the mixing two quantities of air of different temperatures?—Certainly.

357. Do you think a uniformity of temperature in the air supplied can be obtained without some such intermediate process?—I think so; at least for all practical purposes.

358. Supposing the air to be warmed by means of stoves or tubes placed on hot plates, how could you regulate the temperature of the stoves as to insure the air entering the room at one uniform temperature; or, supposing the room to increase in temperature from the accession of numbers, how could you control the stove so as to diminish the temperature at pleasure?—I think a properly constructed stove would allow of throwing a greater or a smaller quantity of cold air through it, and in that way its temperature might be sufficiently regulated.

359. Do you not think the regulation of the temperature of a stove by dampers or otherwise a more simple mode of obtaining the object than the regulation of various quantities of air of different temperatures to be introduced into such chambers?—Certainly, great attention should be paid to the system of dampers in the different air flues; and the admission apertures should be so arranged as to admit of the whole being opened or closed at pleasure, and that without delay or difficulty.

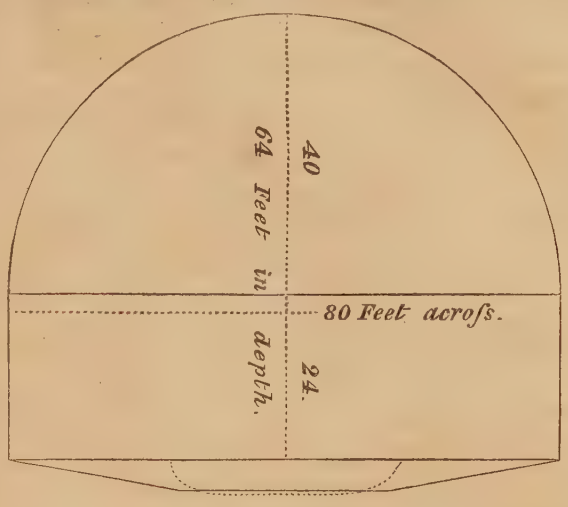
360. You would recommend, however, an intermediate chamber for the air warmed to enter before it enters the room to be ventilated?—If possible, I certainly would recommend it, unless there were any considerable practical difficulties in the way.

361. You do not consider that of essential importance then?—No, not absolutely essential; but by throwing the heated air from the stove not immediately into the House, but first into a chamber accessible to the superintendent, its temperature might be more accurately observed and regulated.

362. You have spoken of the height of the room as one thing necessary to good ventilation, what height do you think a room ought to be, such as that proposed for either Houses of Parliament, say 70 feet square?—I am not aware of the proposed form or dimensions of the new Houses of Parliament. The theatre of the Royal Institution which has been mentioned, and which therefore may serve as a point of comparison, is nearly semicircular, and I think 60 feet in the chord by 44 deep. Perhaps I should describe it more correctly by calling it a semicircle of 30 feet radius applied to a parallelogram of 60 feet by 14; and I may here mention that

that the walls are cased with wood work, which is very essential to the perfection with which persons are heard in it.

363. Do you recollect the height of the Institution?—I think it is 30 feet high to the ceiling; but it is very essential, in the construction of a room which is to be well ventilated, and at the same time well warmed, that there should be as little impediment as possible to the thorough mixture of currents of air throughout its interior. I think the theatre of the Royal Institution, including as it does a gallery, is too low. I have assumed the form of the new House of Commons to resemble that of the theatre of the Royal Institution, but to be larger and loftier. It should be at least 40 feet high, and perhaps about 80 feet in the chord, and 64 deep, as in this outline.



364. With reference to the purity or impurity of an atmosphere, are there any known means of accurately testing it at present?—In regard to what is commonly called its general purity, certainly; but an atmosphere may nevertheless contain very noxious matter, which cannot be discovered by any ordinary tests or chemical analysis. I mean this, that if I make an accurate chemical analysis of the air of this room, and of the air of a similar room in which there are persons under some highly infectious disease, I can find no chemical difference in the two atmospheres, though I know that the one may produce an infectious disease, and must therefore contain something which the other does not. The air therefore, in this acceptation of the term, may be decidedly noxious, and yet you may be unable to discover any chemical difference between it and the ordinary atmosphere. At the same time, if we find the air of a crowded room decidedly oppressive to respiration, the probability is that some difference in its chemical composition would be discoverable. I examined the air from the upper part of Covent-garden theatre, some years ago, when the house was full, and I found as much as three per cent. of carbonic acid in it.

365. Produced by the vitiation of the atmosphere below?—Yes, and imperfect ventilation. It was at the time when the large central gas chandeliers were first used in our theatres, and I had much difficulty in persuading those who consulted me upon the subject, of the extent of the apertures required to carry off the foul air from them, and at the same time to ventilate the upper part of the house. This was not effected till the proposed dimensions of the funnel were quadrupled, and it was then found that no bad air accumulated upon or spread over the ceiling, which it used to do before, and make its escape by the windows behind the gallery and the uppermost tier of boxes. Those chandeliers are very powerful ventilators, and when well managed supply the place of the warm air chamber which I have already insisted upon as essential to good ventilation.

366. There are no known means by which you could accurately measure the vitiation of an atmosphere like that of the House of Commons, so as to ascertain accurately its cause, and to counteract it by a supply from below of the element of which it had been deprived?—I think not. An atmosphere may be too hot or too cold, or too moist or too dry, without any appretiable difference in the relative proportion of its oxygen or nitrogen; and, in short, a number of trifling causes contribute to what we call the agreeableness or disagreeableness of air, which are hardly capable of being chemically specified.

367. It would not therefore be advisable, in a practical point of view, to consider any chemical means of either purifying the air supplied, or of repairing the deterioration from the presence of numbers?—Certainly not.

368. In the present state of information respecting ventilation, do you or not think it advisable, as there is time previous to the erection of the new Houses, to make some accurate experiments under competent superintendence in the present buildings?—I think we have sufficient data to go upon, without the absolute necessity of any such experiments, provided always that the architects can be brought to consider

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consider the subjects in relation to the original construction of the buildings, and make proper arrangements for heating as well as for ventilation, both of which are too commonly overlooked, or at all events regarded as very secondary objects.

369. Do you think there is any other way than having the means of throwing in both cold and warm air, or cold and warm air mixed in any requisite proportions, to make quickly alterations in the temperature, so that in case complaints were made, you could in a short time bring about the requisite temperature?—I know that by a stove, properly constructed, you may regulate the temperature of the air admitted to a very considerable extent.

370. But suppose the complaint were suddenly made, that the House was ten degrees too hot or ten degrees too cold, do you think you could, at five minutes notice, produce the requisite change?—Certainly not; at least in a room with from three to six hundred persons in it, and such as I assumed requisite for the proper accommodation of the House of Commons.

371. Do you not think you have the most effectual control over the temperature at any required moment, by having a chamber in which you can mix cold and warm air in any required proportion and temperatures?—I think, for the reasons which I have before stated, that it would be very desirable that air for the purpose of warming or cooling or ventilating the House, should enter a chamber previously to its going into the House.

372. That chamber to be supplied either from the stove, or directly from the cold air?—Yes, if requisite.

373. Which do you think preferable, that the air should be warmed by a stove or by steam or hot water?—I think, upon the whole, a stove is the simplest and most effectual.

374. Do you not run the risk of giving a burnt smell, and producing an excessive dryness of the air, so as to render it disagreeable to the lungs?—As far as my experience goes, not unless the stove is overheated, or the constant supply of fresh air which passes through it inadequate; I have already adverted to the necessity of throwing in a large quantity of moderately heated air, in preference to a smaller quantity of air very much heated.

375. Can you advert to any case where the air is heated by a stove, that is, by air coming in contact with heated iron or iron heated by fire or by radiation from fire, in which the air is not rendered disagreeable from excessive dryness to the lungs?—It is only when the air is overheated that it acquires this disagreeable smell, the dust in it is then burnt and it gives it a peculiar odour; the sense of difficulty of breathing is also partly occasioned by the relative dryness of the air, and is therefore frequently counteracted, by throwing in a little vapour of water with the heated air; but in rooms where many persons are breathing or many lights burning, the air is not apt to be too dry.

376. To effect that, it would be absolutely essential to have an intermediate chamber?—It would give great facilities in all respects.

377. Do you know, in case of heating air by steam or hot water in a pipe, are you aware of any experiments of this kind to show what surface of heated iron pipe will raise the air, passed at a given rate, through that pipe any given number of degrees of Fahrenheit, suppose the pipe kept by an adequate supply of steam regularly at the temperature of 212°, and that you pass air through that pipe, that pipe having a given surface at a given rate, how many degrees of temperature will it raise the air passing through that pipe?—I am not able to answer that question, with any thing like useful precision, merely from memory.

378. You are acquainted with the mode of heating warm air by means of a cockle, with pipes blowing on it?—Yes.

379. And you are aware on that system, if the plan of warming the air by contact with iron and fire is objected to, a boiler may be substituted for the cockle?—Certainly.

380. It has been proposed that the air taken for the purpose of ventilation should be allowed to settle for some time in a chamber previous to its being used; do you think that of any importance?—I presume that such proposal alludes to getting rid of the dust and sooty particles, which would be more certainly attained by drawing the supply from a place as free as possible from such contamination, or by passing the air through one or more diaphragms of wire gauze or some such material, which would arrest the grosser particles. When I spoke of a chamber, I merely

merely alluded to a place intermediate between the furnaces or stoves and the room to be heated, in which the temperature and other particulars relating to the air admitted might be accurately ascertained, and in which cold air might occasionally be mixed with it, or hotter air brought in according to circumstances; it would be a great convenience, for instance, if, in heating a room above this in which we now are, there were a chamber in which we could examine the air *in transitu*, and adjust its temperature, quantity, and so forth.

381. The question had reference to the opinion of one witness who has been examined, who has conceived it desirable that the air for the supply of the stove should in the first instance be allowed to settle?—As far as I understand that opinion, I cannot agree in it.

382. Would you wish it to be by steam, letting in steam, and then condensing the steam so as to get rid of the smoke?—Nor that.

383. Take one hundred people, what number of cubic feet of fresh air would you propose to let in in a given time?—I should say, generally, in regard to ventilation, that if one can by chemical means discover a vitiation of the air of any part of the room, the ventilation is imperfect. By the term vitiation, I beg the Committee to understand that I principally advert to excess of carbonic acid above that which ordinarily exists in the atmosphere of well ventilated rooms.

384. To reduce that to practice, what number of cubic feet of fresh air would you let into a room, in a given time, containing one hundred persons, taking into consideration the lighting?—I believe the quantity which would practically be found requisite to the comfort and convenience of the persons assembled would be in some great proportion above that which is theoretically required, or which is deduced from a calculation founded upon the quantity of air deteriorated by respiration and combustion. An individual may, indeed, be said to spoil a quantity of air equal to that taken into his lungs at each inspiration, which amounts to about from fifteen to twenty cubic inches; I have, at least, found that, after emptying the lungs by a forced expiration, the expired air will generally extinguish a candle, and in that condition, though it might safely be breathed a second time, I should, for all practical purposes, pronounce it spoiled. In this view of the question, therefore, each individual may be said to spoil about eighteen cubic inches of air at each respiration, and assuming that the average number of times that we perform this function per minute is twenty, the bulk of air hourly deteriorated would amount to 21,600 cubic inches for each person, or to 518,400 cubic inches = 3,600 cubic feet in the course of the twenty-four hours. The quantity of carbonic acid contained in the expired air varies at different times, but I presume a fair average to be four per cent. The quantity of air deteriorated in any given time by combustion, as by the flames of gas, oil, wax and tallow, is not very readily estimated, inasmuch as it is difficult to say what abstraction of oxygen, or addition of carbonic acid, may be considered as actually deteriorating the air, or rendering it absolutely unfit for respiration; but I have already observed, that air differing very slightly from the general mass of the atmosphere must, for almost all practical purposes, be so considered, and, consequently, that the requisite change of air in a well ventilated room must of necessity exceed any calculation founded upon the quantity of air rendered absolutely noxious either by respiration or flames. But to give the Committee some general ideas upon this subject, I may state, that all the common combustibles consist essentially of carbon and hydrogen, and that 1 lb. of carbon or charcoal, in burning, consumes $2\frac{6}{10}$ lbs. of oxygen, which is that contained in between 13 and 14 lbs. of atmospheric air, and 1 lb. of hydrogen consumes 8 lbs. of oxygen, which is that contained in about 40 lbs. of atmospheric air. Now, tallow, wax and oil contain, upon the average, from 77 to 80 per cent. of charcoal, and from 11 to 14 per cent. of hydrogen, the remainder being oxygen, and 100 cubical feet of air weigh about 112 ounces avoirdupois, or 7 lbs.; so that from these data the approximate consumption of oxygen by any given quantity of the above combustibles is easily calculated; and as the atmosphere essentially consists of a mixture of four parts of nitrogen with one of oxygen, the quantity of atmospheric air which may be said to be consumed will be five times that of pure oxygen. The composition of coal gas varies considerably, and consequently also its deteriorating quality; but I assume that it generally spoils thrice its bulk of oxygen, or fifteen times that of air.

Veneris, 21° die Augusti, 1835.

BENJAMIN HAWES ESQUIRE, IN THE CHAIR.

David Boswell Reid, Esq., M.D., F.R.S.E., and President of the Philosophical Society of Edinburgh, called in; and Examined.

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385. YOU are a physician, and also a fellow of the Royal Society of Edinburgh?—Yes, I am.

386. And also a lecturer on chemistry?—Yes.

387. Have you at all turned your attention to the subject of ventilating and warming large public buildings, as well as to the practical application of acoustics to the construction of buildings?—I have paid considerable attention to both these subjects; I have had my attention particularly directed towards the subject of ventilating large buildings; more especially from the circumstance, that on some occasions in my class-room there are 2,000 experiments performed within the hour, and unless every thing were managed with the utmost precision, the student would be obliged to retire from the class-room in consequence of the fumes that are disengaged.

388. Have you found it necessary to adopt any means to remove fumes or effluvia from experiments you thought it necessary to make for the instruction of your pupils?—I find it absolutely essential to have a power of carrying off those fumes, a power which is perfectly under control, and which can be made to operate to any extent, according to circumstances.

389. Will you explain to the Committee the means you have adopted practically for this purpose?—The means I adopted were simply taking advantage of a current which is determined by means of a column of heated air; a large furnace is kindled, and wherever it is necessary to carry off fumes or to ventilate an overcrowded or heated room, an aperture is made into that vent, or otherwise connected with it, leading the air or fumes from the place to be ventilated.

390. Where do you place the heating apparatus for that purpose?—It is placed upon the floor, a few feet above it; it plays into a large vent, and wherever an opening may be made in that vent, an internal current—a current into the vent—is immediately set in motion, care being taken at the same time that there shall be as free room given for the entrance of fresh air at a different place, as there is for the exit of the heated air.

391. Confining yourself for the present moment to the heating apparatus and the vent, describe the manner in which you connect the vent with the heating apparatus with a view to draw off the foul air of the rooms?—The heating apparatus and the hot apparatus for ventilation are totally distinct, and have no necessary connexion with each other; it is an independent power entirely which is used for promoting ventilation.

392. Do you think it is essential for the success of both that they should be kept independent of each other?—I think it would facilitate greatly the practical application of the plan to have them totally distinct; the additional expense is a mere trifle, for a few shillings a day coke may be obtained for working a large furnace, which would ventilate many different apartments.

393. In the case you allude to, you have placed your stove on the floor of the room in which your pupils are assembled?—Yes.

394. Would you advise that such an apparatus should be placed on the floor of the House of Commons, which is the building to which the Committee is at this time devoting its attention?—By no means; I would have it worked in an independent apartment. It is fitted up on the floor in my class-room because we take advantage of the heat; we find we can carry on a number of furnace operations, of a particular description, with a moderate heat, with the same fire, which induces and regulates ventilation; that being no object whatever, for the purpose required in the House of Commons, it would be better to have the furnace in another place where it would not be inconvenient.

395. In fact, you propose by means of heat to create artificial currents?—To create artificial currents.

396. And whether you place the apparatus below, or in or above the room to be

be ventilated, it is immaterial?—It is of no great consequence; but this is to a certain extent of consequence, that if placed in such a manner that there shall be a current, we may draw the air from the House of Commons, not merely by the vent, but by the lower part which supplies the fuel of the furnace with air, thus furnishing it with additional power; I wish to take advantage not only of the current which is made to ascend from the lighter current produced by the heat, but also to draw from the House of Commons the air that feeds the fire.

397. If the furnace were situated in an apartment immediately over the House of Commons, the air from the House of Commons would rise to it and create that draught, would it not?—It might create a little draught, but the power as produced by the furnace is dependent upon the light and expanded air rising from the fire; at times we have the air warmer without than within, and were it not for the heat actually developed by specific combustion, our currents might sometimes be reversed.

398. But under any circumstances, do you propose for the purpose of ventilation to have the vent tube placed in the chamber to be ventilated?—There is not the slightest necessity for it; if a communication is made by a tube towards the vent, that is all that is essential.

399. You could place your heating apparatus on the roof and it would draw its supply from the whole body of air in the chamber?—The furnace might be placed on the roof, or by the side of the floor, or below it.

400. Then with regard to the apparatus for warming, have you any suggestions to make to the Committee on that subject?—I am not aware that I can offer any thing but what I believe is generally well known. So much has been done of late years with respect to heating by water and steam, that I am not aware I have any thing peculiar to offer.

401. Do you think it a matter of any importance that the supply of air should be taken from the neighbourhood of the building in question, or from any given height above the ground, with a view to obtain greater purity?—I should think that would depend, in a great measure, on local circumstances.

402. In reference to the locality in which this House is likely to be placed, do you think it important to go to any height from the ground?—I should prefer its being taken from some height, as I understand the situation is damp; I have no practical knowledge of the situation, having only lately come to town, and not having seen it, I could not venture to give an opinion, but I should certainly prefer it to be taken from some height, rather than from the ground.

403. Above the chimney pots?—I do not know that that would make a great difference, if the new House of Commons be surrounded by an open area; I should consider it advantageous, however, if it shall be surrounded on every side by buildings.

404. From whatever place the supply is taken, ought it not to be a spot freely open to the action of the winds and atmosphere?—It would be preferable. I had understood that the situation would be such that it would be freely exposed, that it would be probably built on what is a free open area.

405. Do you contemplate that when the House is crowded the ventilating apparatus should also be used at the same time?—It should be ready for powerful action at all times; but I would not propose that the ventilating apparatus should be brought into full action until it was absolutely necessary; it could be worked always in such a manner as the varying circumstances of the case might require; I should of all things wish to avoid any accumulation of bad air, so that it became necessary to use the ventilating apparatus with great power; but I would not put on the ventilating apparatus until Members actually began to assemble, and from that moment the ventilating apparatus being in action, it would be better to keep up the purity of the atmosphere by a general and equal flow than by allowing bad air to accumulate and then working it with great power. In many of the buildings which I have seen there is not nearly sufficient exit and entrance provided for the quantity of air required, so that when the windows are afterwards thrown open, cross draughts are induced in every direction. I met a curious instance of that last night in the Houses of Lords and Commons, I happened to go up where the reporters were, and I traced a powerful draught of air which issued from the reporters' gallery in the House of Lords, and it continued to enter in at the reporters' gallery of the House of Commons for a long time, the intervening doors being all open; some person was standing at the green door, which would otherwise have shut itself; I have no doubt that that was to be attributed, in that individual

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instance, to the opening of the doors and windows in the House of Lords, which in crowded rooms at times completely interferes with all the ordinary arrangements of ventilation. There evidently was not a sufficient opening in the roof for the great body of air which was entering.

406. That was a draught of vitiated air?—Yes; it was proceeding from the House of Lords to the House of Commons when the green door was opened. Some of the ventilators at the side of the passage behind the reporters' gallery in the House of Commons were also giving vent to the air from the House of Lords, and not receiving air to purify the passage.

407. From whence was the supply taken in that particular case you allude to?—The supply had, no doubt, come from some of the doors or windows in the House of Lords near the Throne, which had been opened for some time; and, from the magnitude of the current, put an end to all the ordinary currents which the ventilating apparatus might otherwise have commanded.

408. It would be clear, from what you now state, it is your opinion that in constructing the building generally, reference should be had to the position of the doors and windows, as well as to any ventilating apparatus that may be applied to secure good and proper ventilation?—The utmost attention, I think, should be paid to this, if it be intended to use them at times to assist the ventilation; but I would strongly recommend that they should never ventilate at all by doors (that there should be double doors), nor by the windows, except under the most peculiar circumstances. There might be arrangements made with advantage for throwing open the room by doors and windows to a certain extent; but if provision be made by other means, the ventilation will be completely under control when there is a power which can be regulated. The moment we begin to ventilate by doors and windows we may refresh those who are very near, but we have a sweeping current that runs in a particular direction, and there is no equality of ventilation; some may be refreshed or perhaps injured by the draught under such circumstances, but there will be no equality of diffusion; and others may receive no fresh air at all.

409. Do you suppose that the same ventilating apparatus might be made applicable to the House and the Committee rooms of the House in the morning?—That is what I should wish to see done in every large establishment, not only the ventilation of the large room, but also tubes connected with the smaller apartment, and valves arranged so that the apparatus might work exactly in the same manner as water or gas in pipes laid through a city. If there be one great chimney or ventilator through which every thing is to pass, by opening or shutting a valve in every individual room or apartment, be it what it may, any degree of ventilation can be commanded that is required. But a general difficulty has arisen in consequence of these provisions in most places not having been made any thing to the extent that is absolutely necessary, consequently, when in full action, the doors and windows are thrown open all at once, and it disturbs every thing like unity of operation. There is another thing connected with ventilation as conducted by heated air, namely, that it is not liable to the noise produced when the ventilation is induced by the working of a fanner or other common mechanical power put in action by machinery. Further, the same power dependent upon the application of heated air will also enable cold air to be thrown in whenever it may be necessary, which may be artificially depressed in its temperature in warm seasons; this would give great relief when there are months together of continuous hot weather. I should wish to see, not only arrangements for renewing air and warming it in the winter, but for cooling it in summer, which I think might be done with very great facility.

410. Is it not absolutely necessary, for a sound ventilating system to be obtained in reference to the new buildings, that the architect and the ventilator should go hand in hand?—In every thing, and even as to the lights. In many of the buildings in which I have been engaged we not only made provision for the arrangement of ventilation as I have mentioned, but all the lights which are employed are never allowed to mix their bad air with the atmosphere of the room; the bad air is carried away by an independent tube to the same large branch that leads to the working ventilator.

411. Have you been engaged in applying a sound system of ventilation to any very large buildings?—Not to any very large buildings, with the exception of my class-room.

412. What is the size of your larger room?—Eighty feet square.

413. Containing

413. Containing how many persons?—One thousand persons could be in it at one time; the part which is seated can accommodate 300.

414. Practically speaking, how many persons have you had congregated usually in the room?—The apartment is divided into two by some furnaces rising several feet above the floor; one small portion of it is seated for 300, the other larger portion is not seated at all; the students engaged there are all experimenting. The roof is supported entirely on chimneys, and there are about 100 furnaces altogether, which can be brought into operation at the same moment.

415. Have you applied the principles you have been detailing in ventilating this larger room?—They are.

416. You have found them universally efficacious?—Yes; and I was informed, just as I left Edinburgh, that they have been adopting the same principles in many other establishments of late; and further, that is the principle on which ventilation is carried on and has been carried on for many years in some large manufacturing establishments, where they have to combat not only with the noxious air from respiration, but with fumes of every description.

417. Do the persons in your large room vary very much in number?—Yes.

418. Backwards and forwards, or beginning with a small number?—Most irregularly; sometimes there are not above two students or one; sometimes there are from six to 200 or 400.

419. And backwards and forwards?—Yes, continually, from six to eight hours in the day.

420. Still you find the ventilation successful?—Most successful, because I have a regulating power, and by simply turning a plug, I can increase the exit or entrance for the air, or diminish it at pleasure, and with the utmost precision.

421. How do you regulate that power; by what do you guide yourself—by a thermometer?—We have not used the thermometer, we have not found it necessary; but still the thermometer would be what we should confide in most in applying it specifically; we generally regulate it by our feelings, and also by the operations we are engaged in.

422. There are certain kinds of operations you provide before they begin?—Yes.

423. Regulating your ventilation by the anticipation of your operations?—Quite so; the ventilating apparatus is put on for hours always before we commence.

424. By putting on, what do you mean?—We heat the furnaces.

425. They are not put in action, but only prepared for action?—They are only prepared for action; but sometimes they are allowed to work on from the very commencement, and in the event of a number leaving the room at the same time, we always make a point of continuing the ventilation so as to leave the room uncontaminated with any bad air.

426. You do not contemplate the principle of regulating it by a self-regulating action?—I should almost doubt whether that could be done; I do not say it might not ultimately be effected; but I have seen such a great number of ventilators fail in this respect, being subject to such a number of influences, that unless we were almost to attribute to them a kind of mental reaction, they could scarcely adapt themselves with precision to the varied circumstances under which they must act; but any ordinary attendant may be taught, by a little attention to the thermometer and the number of Members present, to increase or diminish the working of the apparatus to any extent.

427. That thermometer may be placed in some great thoroughfare, so as to be open to inspection?—Yes, it might be placed in the body of the House, so as always to be before the Members. One might easily be constructed for this purpose, both large and sufficiently delicate to be a constant check upon the ventilating apparatus; the usual register thermometer might also be used, so that a most complete check may be obtained over the machinery, and the attendance of the person engaged in conducting it, at times when no one might be present to examine the heat, &c.

428. Supposing the thermometer rose very suddenly, do you think that then the apparatus you are talking of would rapidly reduce that apartment to a proper state of ventilation?—It could be made to work to any extent. I may mention, on several occasions, gentlemen may have come in from a distance, foreigners and strangers, to see the working of my ventilating apparatus; when there was nothing doing in the laboratory, we have put on the fire with a few pieces of wood, and in the course of five minutes we were able with that to bring it into such a

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state of activity that fumes produced in showing some experiments were carried with great rapidity by these ventilators, which, in the course of three minutes would have filled the room to such an extent that we should have been obliged to go out, had they not been in action.

429. With regard to one apparatus being efficient in ventilating the new Houses of Parliament, and all the Committee rooms and other buildings, should you adduce that as an advantage in point of economy, or in point of general equability of ventilation?—In every point of view; better than having more than one, for a very small power is quite sufficient to work a great number of small ones.

430. Taking the Houses of Parliament, without going to the other rooms, suppose there are 30 Committee rooms, would you say that one apparatus should be sufficient to ventilate all this over a large surface of ground, as well as the House of Commons and the House of Lords in the same way?—They might all be ventilated by one large furnace.

431. Are you aware of the size of the House and the Committee rooms?—I did not observe what number of Committee rooms you mentioned, nor am I aware of the size.

432. It is rather a matter of judgment, arising from the extent and number of apartments, than any thing else, as to how many of those furnaces you would have?—It may be more economical to have two large ventilating furnaces if the rooms are very much apart, than to carry all the independent flues a very great length; I would not wish to be understood to say they might not be managed by one.

433. To give a decided opinion upon it, it would be necessary to know the extent of the building and the plan of it?—Yes, and also whether the whole power would generally be required, or only a very small part, at times, as for a few Committee rooms independent of the House.

434. Can the tubes be conducted to any considerable distance from the room to the apparatus?—To any length almost; I have seen them conducted hundreds of feet without any material difference.

435. What sized tube would you have to ventilate such a room as this, to be in connexion with the apparatus; what diameter of tube?—Unless one calculated the size of the room, it would be difficult to say.

436. Do you mean the total diameter of the various tubes, or the tube for this?—Of the tube for this room; but that is dependent to a great extent on the rapidity of the current, and that will be dependent on the height of the chimney; the means are all at command; but the one must be adjusted to the other. The number of people the room can hold must be calculated, and suppose it to be full for a certain length of time, then the amount of air deteriorated within a given time, and the size of the tube, &c. must be calculated, the ventilator being in its utmost activity.

437. You would not have the tube of so large a diameter as to occasion inconvenience in making the building originally?—A tube so very large and inconvenient would not be required; but every thing would depend on the primary arrangement made by the architect; it is not a thing to be added, but to be seen from the foundation, and all those flues could be carried under ground, and there would not be the slightest necessity for one to be conducted in any way where it would interfere either with ornaments or any thing connected with the building. You may carry the air down as easily as you can carry it up. I admit, indeed, that the movements induced during the rarefaction of air are such that it would be more easily carried up than otherwise; but yet, with furnaces, the difference is not so great as to make a decided alteration in any plans connected with the arrangement of the ventilating tube.

438. You would be more liable to a return current in case of any mismanagement of the tubes, in case you convey them down from the ceiling of the room?—Yes, I admit that; but at the same time, when the furnace is attended to with moderate care, I should not anticipate there would be any danger of those accidents occurring.

439. As to the admission of air for the House of Commons, how would you propose to arrange the tubes for its admission; would you distribute them over the floor, or would you admit the air at one great aperture?—I should prefer that the air were taken out at one aperture, but admitted by a great many, and broken as much in its impetus as possible by the division of the tubes, as far as that could be effected, and if no arrangement be adopted for preparing the air in its temperature before it be admitted into the House, which I consider the most effectual mode of conducting a proper system of ventilation, I should perhaps be inclined to prefer that

that the air should be admitted at a little height, than exactly on the floor or on the ground, for though the air be admitted from the floor in 10,000 little apertures, still there is some danger of the Members feeling the effect of the direct introduction of the cold air in very cold weather. This system must necessarily be considered defective, as the cold air, though broken in its force before it could reach the Members, would tend to carry along with it a portion of the respired air with which it must necessarily mix; whereas by introducing over the body of the floor the whole of the fresh air at a regulated temperature, air once respired would be carried away, and the atmosphere would never be of that oppressive character which often increases to such an extent in some buildings, where the respired air is not so easily carried away, as to produce a very powerful sedative effect, often accompanied by severe headache, more especially when it is necessary to maintain a continued and anxious attention to any subject under discussion.

440. In the admission of warmed air in the winter a little height from the floor, would it not leave a stratum of cold air on the ground which would be disagreeable to the feet?—I understood the question arose as to the admission of fresh air; much would depend on the apparatus used for the communication of heat.

441. Have you ever turned your attention to the effect on the skin of different currents of air in different circumstances of dryness and moisture?—Yes, I have.

442. Do you consider that the draught depends on the rapidity with which the air blows on you, or on the state of the air?—I should apprehend both must be taken into consideration.

443. If the air be in a proper state of moisture, and of a high degree of temperature, that would not be called a draught, which if colder would be called disagreeable and a draught?—That depends on the use of the term; perhaps the word may be employed in various significations, according to the acceptation in which we use it; in our part of the country we have generally understood by a draught a current, be the nature of the air what it may, as for instance, when we wish to produce a powerful draught in a furnace where we wish a rapid communication of air independent of the quality.

444. But the evils of a current of a certain velocity may be equally great whether the air be moist or dry?—There must be a difference there; a very dry current of air passing across the face may produce a very different effect from a very moist one; I see exactly what is meant; I would consider it of equal importance, indeed of much more importance to divide the current of hot air than of cold air, because when a current of cold air is introduced, it naturally falls down and diffuses itself; but if hot air be introduced from any particular source, and in great quantity at one place, that will rise in a stream to the top, without benefiting those in the body of the building. We have had remarkable instances of that in public buildings, which it was said could not be heated, though great sums were expended upon them. At a distance of 20 or 30 feet from the floor there might often be observed a stratum of air at a temperature above that of boiling water, while below the air has been disagreeably cold.

444.* In the admissions of warm air to supply the room, it would be necessary to distribute the apparatus evenly over the whole surface of the floor?—As widely as possible.

445. And as numerously as possible?—Yes, so far as it could be conveniently done, the heating surface on the floor could not be too extensive.

446. It is necessary to conduct the heated air over the whole surface of the floor and not to trust to an apparatus radiating the heat?—I should think it absolutely necessary to conduct the heated air when it is supplied in currents; but if you have different stoves heated by steam in different parts of the building, or surfaces of iron heated by hot water or otherwise, that may make a great difference. The great objection to stoves or large plates heated by water or steam, is the unequal currents which necessarily accompany them, and the return of respired air in a descending stream. In all lofty buildings, it is impossible to have that sweet and fresh atmosphere which might be so easily commanded in a less elevated apartment, where a stream of air might be made to rise slowly but continually from the floor to the top of an inclined roof, to be removed there by the ventilator. A lofty room is generally preferred, because, from the mass of air present, a long time is necessarily required to contaminate it; but when prolonged debates are carried on, it is evident that the very cause which prevents it from being contaminated to such an extent at first, will render it exceedingly difficult to renew the air when once it shall have been vitiated.

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447. Would you propose to regulate the velocity of the air admitted by artificial means, or trust to its change of place simply by its altered gravity?—I would propose to have every part of the ventilating apparatus under precise control, without that it is utterly impossible to adapt the currents to the varying circumstances of the place; arrangements ought to be made to cut off the supply entirely, to exchange a pipe of cold air for the hot air, and in short, to effect any change upon the currents we may wish at a moment's notice.

447*. Those apertures might be so regulated, that a person sitting in another room, by turning a handle, might open or close the valves?—Yes; it is easy to do that; at the same time it would be necessary to have them all under some general control or superintendence in case of their not acting harmoniously together.

448. Have you also directed your attention to the communication of sound in public buildings?—Accidental circumstances have led me to pay considerable attention to that subject of late.

449. You constructed on some scientific principles the room in which the great dinner was given to Earl Grey in Edinburgh?—I was on the committee on that subject, and many of the members of the committee, along with the architect, were frequently in my class room; but I cannot take the credit of having constructed it. I believe I gave what hints I could with respect to the form and several other circumstances connected with the sound; but the merit of the arrangements is due to the architect, Mr. Hamilton.

450. You were aware of all the principles on which it was constructed?—Yes; but I differed with respect to the use of the canvass; I was anxious to increase its power in communicating sound at the expense of some ornament which could not be introduced well without the canvass, though even with the canvass I believe there was no room in which communication of sound was heard with greater advantage under the circumstances. Perhaps I may be allowed to mention that I tried the room with the canvass, and after the canvass had been taken down, and that, in order to be capable of forming a most decided opinion on the subject from actual trial, I employed people to read and to sing in it, that I might study its power of communicating sound in every possible manner; and thinking it a most excellent opportunity of also trying the comparative power of the canvass and the wood, though I believe people are generally agreed on that subject, I consulted Hertz, the pianoforte player, and also Mr. Murray and Mr. Findlay Dunn, celebrated for their professional talents and attainments in those experiments, and Hertz mentioned particularly, "that the sound was not sonorous," that was his expression. It was beautifully distinct and clear; I am not aware that in any room music was ever heard which was so beautifully clear and so melodious; but at the same time it had not that strength and power which was observed when the canvass was pulled down, and when the sound was strengthened by a reflection from the roof. The beauty of music upon a lake or other still water is proverbial, and I attribute it to the same cause, to the purity of the tone where there are no prolonged reverberations interrupting each succeeding note.

451. What should you consider the essential conditions of a room for the purpose of the Houses of Parliament in reference to the communication of sound?—With respect to the form, a square form on the whole I should be inclined to prefer, as bringing the Members nearer to one another than can be done in any other way.

452. Than by a circle?—I was going to add, than by the circular form, which is very ill adapted for the communication of sound in a building such as the House of Commons, whereas the other is not.

453. Do you mean perfectly square, or oblong?—I would say about square. Again, the walls ought to be as low as possible, and arranged in such a manner that no sound can be reflected repeatedly from the one to the other. The roof ought to be as low as possible, or as low as may be consistent with the size of the building, and to have a great reflecting power, so that the direct voice of the speaker may be strengthened by the reflection from the roof; and, lastly, the voice having been strengthened by this single reflection, all further continuance of the sound ought to be destroyed by throwing it upon some absorbing surface, as upon an irregularly and matted floor. I might add here, from a number of different experiments, I found no difficulty in conversing at the distance of from 100 to 1,000 feet in the open air. Sir John Ross told me lately, when I met him at Dublin, that he had no difficulty in conversing at the distance of a mile in the still and silent atmosphere, which often occurs in the polar regions. Lieutenant Bowen has conversed at the distance of a mile, or upwards, across a frozen lake,

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and Mr. Parkin, of the Royal Marine Hospital, Woolwich, informed me, among many other interesting circumstances, that at a particular place near the top of the hill at Cawsand Bay, he had frequently heard with the utmost distinctness the laugh and conversation of the sailors on board of the frigates and other vessels at anchor there, one to two miles distant from the place where he was. The difficulty of the communication of sound in public buildings, therefore, must be attributed, in most cases at least, not so much to a want of power in the voice of the speaker, as to the interruptions which arise from prolonged reverberation and other causes. In some rooms, after ceasing to speak, I have found the sound continued for five seconds, and I have no doubt that it was continued for a much longer time, though we could not directly affirm that we heard a distinct tone. Every instant that sound is continued, after once a new sound shall have fallen upon the ear, tends to make it less and less distinct. In searching for facts connected with the time and the distance at which sound may be heard, I have found, from some despatches forwarded to Government and referred to in geological works, that the sound of a volcano has been heard at the distance of 900 miles, and that the sound of cannon has been distinctly traced to the distance of 300 miles. Captain Stoddart commanded one of the vessels in the fleet at a time when it was extended 300 miles on the shores of the Baltic; one day he heard the firing of cannon, it was during the time of the war, it was not very distinct at first, but he boarded some vessels that were near, and they all agreed that the firing was distinctly audible. He noted the time and place in the log, and some time afterwards, the whole fleet having met, he stated the circumstance, and at a council they referred to their logs of that date. It was found that those vessels which were further away from Captain Stoddart, in a particular line, heard the sound more and more distinctly at the same time that he had observed it, till at last at the extreme verge there was one vessel which was sailing past a foundry where they were proving cannon all day; the firing was on land, and it was heard at the distance of 300 miles.

454. The exact difference of time was not stated?—The sound continued all day.

455. Was the surface of the sea remarkably smooth?—I understood that it was not rough.

456. Have you any knowledge of the state of the atmosphere at that time?—So far as I could gather, there was a gentle inclination of wind in a particular direction, which no doubt favoured the transmission of sound.

457. Have you any fact to state as to the barometer?—I can only state I heard the circumstances mentioned generally; I told Captain Stoddart that I should feel obliged at a future opportunity, when he was disengaged, if he would give me all the details he recollected or could get access to, which he has promised to do.

458. As to the distance at which it is stated sound is heard in high latitudes, do you attribute that principally to the perfect silence of the atmosphere, a total want of all agitations, or a peculiar state of atmosphere itself?—I should be inclined, from what I have heard myself, and trying the communications of sound in all situations, to attribute it principally, if not entirely, to the extreme stillness of the atmosphere. When the wind flows gently in any particular direction, it favours the communication of sound considerably in the same path. I know an instance where the sound of a powerful military band was heard, though imperfectly, at the distance of 20 miles. The noise of a steam boat, or even of oars of a small boat, are easily heard, under favourable circumstances, at a distance of many miles.

459. Your general principle is, in reference to the House of Commons, that there should be one reflecting surface extending as nearly as possible over the Members by the ceiling, that the walls should be non-reflecting, and the floor absorbing, to prevent the echo; but you do not state the form of the ceiling, whether it is to be coved or flat?—The form of the ceiling is that which you see represented in the sketch of my class room; it should be inclined and meet in a point.

460. Do you recommend that form of ceiling with reference to its superiority for ventilation or hearing?—On account of both these; I think it frequently happens that both circumstances combine; the same form of ceiling that allows all the moist heated air in a crowded evening to collect at the top, will also throw most broadly the pulses of sound across the greater portion of the audience, the object being, not that the sound should accumulate in any particular part, but be diffused as equally as possible over the whole of the House. If you have a broad reflecting surface, inclined in that manner, it may be shown that that surface is most conducive,

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cive, and will be most powerful, in distributing the pulses of sound equally among the Members.

461. But in that form the person speaking from near the wall would be better heard than if he were speaking in the centre?—That may be; but it seems that in every part of a room constructed on that principle, whether the person speaking be in sight or out of sight, whether one or two be in the room, or several hundreds, there is no difficulty either in hearing or in distinctness of articulation. Many rooms will produce a more loud and sounding noise, perhaps they will be better for the *premier coup d'orchestre* in a concert room, but if it is distinctness of articulation that is wanted, or to experience melody in its purest form, strengthened however by a certain reflection from the roof, that is the form I would recommend. The difference between distinctness and purity of intonation, however low the tone may be, and that confused and noisy sound that is produced in some rooms, has been very little attended to, practically, in the construction of buildings, and still less the effect of reflection upon the voice of the person speaking. Where, from any particular cause, many reflected sounds strike upon his mouth, it is impossible for him to articulate distinctly, however articulate, under other circumstances, his enunciation may be; a physical cause opposes the free action of the muscles that regulate those movements by which speech is produced, and any one who studies the subject practically, till experience makes him familiar with it, will acknowledge the great difference in the sensation produced upon the mouth when he speaks in a well constructed room and then in the focus of a large parabolic reflector, for example, opposed to a powerfully reflecting wall.

462. Of what material would you propose to construct an interior?—I would propose that it should be constructed of wood, and that it should, as far as possible, resemble the sounding board of a pianoforte. In experiments in the open air, when we were in a valley, and the situation peculiar, I have repeatedly spoken to individuals 200 feet distance from me when they did not hear a word, if they were in the line of the valley, so that there was a great hollow extending indefinitely behind them; while others who were still more distant than them, at twice or three times the distance, but who happened to be at one of the sides, heard distinctly every word without the slightest effort.

463. Then they heard reflected sounds?—They heard the primary united with the reflected sound; they were so close to the reflecting surface, the primary sound no sooner came to them than the reflecting sound came up and strengthened the primary impression; so in the same manner the roof should be so near the Members that the voice of the person speaking should be strengthened by the reflection. If we admit a certain height for ornament and ventilation, let that be as low as possible, and the more equal will be the communication of sound in my opinion, not only from theory, but from direct experiment in my own class-room and other buildings.

464. What is the height of your own class-room?—The walls are nine feet high, and the roof is between 23 and 25 feet high in the centre.

465. It seems to follow, from what you have said, that you would recommend the Houses of Parliament to be without galleries?—I should strongly recommend they should be without a projecting gallery; but a retreating gallery would not be very disadvantageous.

466. You would have no place for a retiring gallery with so low a wall?—The retiring gallery should be made immediately behind a series of pillars, as will be shown by the annexed plan.

467. With reference to the position of the Speaker of the House of Commons, would you propose to adapt what is called the Speaker's chair to the favourable transmission of sound, or trust entirely to the room itself?—I should have no hesitation in saying I would trust entirely to the room itself, were it constructed on these principles. At the same time, if it was fixed that the Speaker's chair should have a place near the wall, which I presume may very probably be the case, it would be almost unnecessary to do any thing for the communication of the sound, as, if that were made a good reflecting surface, and inclined in such a manner that no reflection were kept up between wall and wall, he would require no peculiar arrangement either to hear or to be heard, without any effort, in any part of the room.

468. In that case the Speaker would always be directing his voice, in point of fact, towards an absorbing surface, for the strangers' gallery must be opposite to him,

him, and not in the side of the roof?—He would, under those circumstances; but at the same time the sound would be reflected from the roof, spreading from the situation in which he was placed on either side the roof, inclining on either side of the Speaker.

469. Would you explain upon what principle you have a preference for a square to a circular form?—On this principle: whenever there are any concave surfaces, it is the same generally speaking with sound as with light; that is, from the angle which the sound makes as it falls upon the surface, it is necessarily collected into foci, and in circular rooms there are, accordingly, more or less points where the sound is heard with greater power, while it is comparatively deficient in other places. The object in the House of Commons being an equal transmission of sound, that is the reason why I give a preference to a flat surface.

470. If you were understood rightly, you would depend principally on the ceiling for the reflection of the sound, and you propose to have walls of an absorbing surface?—The part of the walls that are brought more immediately into play would be so extremely low, and converted at the same time into a kind of gallery, that perhaps, with the exception of that part where the Speaker may be placed, they could scarcely be said to have any of the properties of ordinary walls in reflecting sound.

471. By adopting the circular form, you would bring the Members closer together, and therefore in that point of view they will be able to make each other heard more easily?—I am not aware that the advantage gained in this respect would in any way balance the difficulties that would present themselves from the collection of sound in foci; and even, whatever materials are used, it is perhaps impossible to have a surface that is absolutely non-reflecting; it is more or less reflecting merely in comparison, for even the very canvas we at times put up to destroy the reflecting power which may predominate in some particular buildings, has been known in other cases, when stretched, as in the sails of a ship, to collect pulses of sound from bells that have been ringing 100 miles distant, and rendering them observable.

472. As to the position of the seats, have you any idea whether it is convenient or no for the transmission of the sound that they should be raised one above another?—As the floor is considered to be an absorbing surface, on the principles I have alluded to, I should imagine that if they were elevated one above another, so as to allow the Speaker to see the Members distinctly, and the Members to see one another, it would rather facilitate the communication of sound, and the perfect absorption of the reflected sound.

473. In fact, the elevation of the back seats would tend to diminish practically, so far as sound went, the height of the walls?—Yes.

474. And to diminish the inconvenience of the circular form?—Yes; at the same time it being admitted that the power of sound is proportional to the intensity of the mechanical impulse made, the area through which it is to diffuse itself and the manner in which it is strengthened by the reflection from the walls, every space, every superfluous space, that can be cut off without interfering with the principles above alluded to, or rather with their applications, will be a gain to the Members in facilitating the communication of sound.

475. As to the openings in the roof and walls for light and air, should you propose to arrange them according to any past experience you have had?—I should consider that an object of very great importance. The first thing that led me to direct my attention to this subject was what occurred in a church, where it was almost impossible to hear the preacher, in consequence of the prolonged reverberation. After spending some little time in it I left it, and was surprised, when I was totally out of sight of the preacher, to find that I heard every word distinctly. On examining into the circumstance, I could only attribute it to this cause, viz.: that the direct voice of the speaker was perfectly sufficient to be audible in every part of the building, but that, at those particular openings into the passage, it alone had come out, and there affected my ear alone, whereas, in the interior of the building, I not only heard the direct voice of the speaker, but also the confused noise produced by all the prolonged reverberation of preceding words. If, then, from one or two apertures alone such a body of sound can escape as will render the speaker's voice distinctly audible in separate apartments, we are entitled to infer, that if that portion be prevented from escaping, it would tend much to add to the power of the Speaker's voice within the House. Further, not only will the loss of sound be prevented, but also the entrance of all discordant sounds from without.

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without. In every large city there is a continual hum, and the noise of people walking in the street, of bells, of horses, of coaches, and the like, though on every occasion they may not be distinctly audible, still produce a certain amount of sound, which detracts from the purity of intonation. If, then, the loss be prevented on the one hand, and the entrance of discordant sounds on the other, there will be much added to the power of the room in communicating sound. In those rooms where I have seen all those openings arranged in such a manner, that while air was permitted freely to enter or to escape, yet the sound had to be reflected two or three times in passages, so that it was lost as it were, and could not produce any specific effect if entering from without, or reflected back into the room if formed within, the intonation was more powerful and more distinct than when that was not attended to.

476. Would you propose to light the new House of Commons entirely from the roof by means of a lantern?—I consider that many different plans might be adopted; I have generally preferred as equal a distribution of light as possible, so that I would regard it as more advantageous if there could be lights at many fixed places than if there were one great and powerful central light radiating to every point of the room. A large window with obscured glass might be introduced at the gable, and a series of windows might also be placed in the interior roof, supplied through powerfully reflecting passages connected with the exterior roof. Again, at night, if the pillars supporting the galleries or between the different parts of the galleries, according to the plan laid before you, lamps were placed, then these would distribute the light very equally throughout the whole of the House, without being extremely painful or injurious to the eye at any particular point. I would further wish to mention, that whatever lamps are used at night, the bad effects arising from the combustion should be carried away by independent tubes to the ventilator.

477. As to the lighting of the room by day, would you propose to do that by lanterns in the roof, or by side-lights?—I should prefer side-lights; there would not then be any danger of interruption from heavy rains or hail, which occasionally makes such a very loud noise, even on a few panes of glass, as to interrupt the proceedings of an assembly. I should see no objection to having those arranged in the roof, but at the same time they might be formed in such a manner that the light might be taken from the side by making a projecting window raised upon the exterior of the outer roof, in the same manner as many garret or storm windows, and not in the form of the common sky-light.

478. You would not apprehend any interruption to its perfect operation by those breaks in it?—Those breaks might be arranged so as not to interfere with the effect of the roof to any great extent, for if there was a double window, then the glass would there supply the place of the boards.

479. Is glass equally efficacious, in your view, of sound as wood?—Yes.

480. Would you state to the Committee whether you consider glass as eligible for the reflection of sound as wood?—I should certainly consider it so in those situations.

481. As to the outward walls, what sort of thickness do you think they should be with regard to the sound; ought there to be a very thick outer wall or not?—I should prefer a thick outer wall, as giving more power to heating in winter and of cooling in summer, as well as in reference to the communication of sound.

482. And in excluding sound?—Yes; a thick wall would render it freer from all disturbing causes, whether from sound or cold.

483. Do you contemplate the actual roof of the House of Commons should also be the outer roof, or a double roof?—I should contemplate a double roof, for in case of noise from rain or hail, if there were only one roof, it would be almost impossible to prevent the greatest interruption, and in summer no means could be adopted with facility to prevent the room becoming extremely warm.

484. You would light the outward roof with a number of garret-shaped windows, and let the light in from the loft to the interior of the building by glass openings?—Yes; in that building of which you have a sketch before you, we have no double roof; we have a single roof; it answers extremely well; but we are liable to the introduction of sound I have mentioned, in consequence of not having a double roof.

485. And, practically, you have felt that inconvenient?—I have.

486. Do not you think it better if the roof of the house of assembly, or the room in

in which we sit, should be wholly distinct from the outer roof?—That was always my impression; I understood that was contemplated.

487. Would you not find great practical difficulty in lighting a room from the outer roof?—Not if the arrangements were made from the commencement.

488. And if the window in the roof could be done away with, it would be better to do so, and to have no window there?—I think it would be advisable, if it could be done, to have windows in the roof, to make the light more equally diffused.

489. Would you rigidly interdict the use of all ornamental work in such a roof?—On no account; I should consider it not merely desirable for its own sake, but advantageous for sound. Had it not been necessary to attend in the strictest manner to economy in a large establishment I put up at my own expense alone, I should have had every one of these cross partitions in the roof ornamented. I consider these cross partitions are of great value in respect to the communication of sound, and on this ground: in the first place, experimentally, I found that if I made an impulse in water in a particular direction, instead of that impulse extending, as it were, throughout the whole of the water, as it is generally believed to do, a wave was made to roll along upon a particular surface, while the rest of the water was quiet and still; this I believe to take place to a certain extent in the communication of sound; if the voice, for instance, be directed on an extremely plain surface, at a particular angle we know we can speak to people at a great distance, if we both go nearer the side of a wall; now if so much of the sound were to fall on the roof at this particular angle, my opinion is, it would run along the roof a considerable way before any amount of it would be reflected on the ground; whereas if the surface of the roof be broken by transverse beams, (by pillars or pilasters, if it be a wall), the sound will not travel in this manner; there is always a reflection at each part to the ground below. There is a tunnel connected with one of the rail roads in the west of Scotland, in which, as I was informed by Mr. Granger, an engineer, it was utterly impossible for one person to hear another at any distance. It happened, however, that either some pilasters were put along the walls, or the tunnel was made irregular, whereas formerly it had been made smooth, and after that individuals heard each other in any direction, at any distance, with great facility and very distinctly.

490. You do not suppose this interruption would, in fact, impede the voice from going to the extremity of the room from where the person speaking was?—To a certain extent it would necessarily affect the progress of the sound; but still, if the general outline is alluded to, I believe the diffusion on the whole would be more equal than what it would be without them.

491. They are not free from that objection; on the other hand, you consider it more advantageous for a great body of auditors, that that sort of interruption should exist?—Yes, I do.

492. Do you conceive the interior of the building ought to be as plainly fitted up, that is, without or with cornices or ornaments of that description?—I think ornaments may be admitted to a very great extent, to as great an extent as they might be desired.

493. Could it be admitted upon principle, could you beforehand state what amount of ornaments could be safely introduced, or what amount ought not to be introduced, so as to guide the architect in his course?—So much would depend on the particular construction of the building, that I do not see at once that I could answer that, unless the question was subdivided. But this I might say, that I have seen buildings which were entirely covered with ornaments, and that in these buildings the sound of the voice was heard distinctly, and I would only refer to principle, but let applications be made according to the peculiar kind of building to be adopted for the House of Commons; so long as you can bring up a reflecting power to act upon the air, while the direct voice of the speaker is still sounding there, so long you will strengthen the voice of the speaker; but I found every thing upon this, that the human voice of itself, when it does not meet with interruption, is sufficient to fill the most ample assembly that ever has been made, provided there be no noise from extraneous sources; that you may, if you choose, dispense entirely with the additional power of reflection, and have the walls crowded with ornaments, but taking care there is a perfect power of absorption, so that the audience hear solely by the direct voice of the speaker, and in ninety-nine cases out of one hundred, if the room be moderately quiet, they will hear distinctly; but they will not hear that body of voice which they would have heard had they also gained by the reflection from the roof; and in a building such as the

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House of Commons, I consider it would not be desirable to take away this reflected strength which may be communicated to the voice; performers on instruments and singers say, when they are in a room which has no reflecting power, that the sound escapes easily enough, but that they do not experience that resilient and sustaining power which makes so many rooms so delightful to speak or sing in; those who pay much attention to the subject feel the tone escaping easily from the mouth, but they do not feel the sound sustained and buoyed up, as it were, where there is too little reflection; in other rooms, where the reverberating power is so great that it interferes with speaking, they are precisely in the reverse condition; when they sound a particular note, they feel there is something playing and working on the mouth, a mechanical power preventing the emission of the tone they wish to introduce; in some rooms, many of which I have been in, if any one stand in a particular position, the voice is returned to the focus if they are placed in it, and they feel as if some one were actually knocking them on the mouth. In one of the reflectors they use in a chapel, which I had been invited to examine, a preacher went up one day who had accidentally not been informed of its peculiarities; there was not only a focus for the emission, but also for the reception of sound, and when he had said two or three words he suddenly turned round, believing some one was mocking him, but it was only the reflected sound of his own voice, which sounded loudly to him, but inaudible to any other person. In the adaptation of these parabolic reflectors, any part of the audience excluded from its influence hear as ill as the others hear well.

494. You would not think it advisable to place the Speaker within a chair with a parabolic sounding board?—I should think it unnecessary with that construction of building; and it would, to a certain extent, be liable to the objections mentioned.

495. Would it or would it not be desirable to maintain, as nearly as possible, a unity of atmosphere in the room, with reference to sound, quite apart from ventilation?—I consider that one of the primary objects of attention, but to what extent that does actually interfere with sound, I am at a loss to say; it is admitted on all hands, and it is known that in an apartment, even a small apartment, we often have different strata of air, and the sound in passing from one to another is much affected in the same manner as light; thus, when we look at any object on the wall through a current of warm air, as when the sun is shining on any building, a current of warm air from a chimney being interposed between us and it, we see the tremulous motion of the air indicated by the unequal reflection of the light upon the wall; so in the same manner, I believe, that when sound passes through different strata of air, a similar disturbance induced, but preventing it from being so clear and uniform as is desirable.

496. Would you positively interdict the use of drapery, particularly round about the windows or the cornices?—I should not consider it necessary to interdict the use of drapery; but whenever there was a powerful reflecting surface, and it was required to take advantage of that surface, then the drapery ought not to be used.

497. You would not interdict drapery on the side walls, but you would from the windows above?—From the roof, or from whatever part we wish a reflecting power.

498. As to the smaller rooms connected with the House of Commons, you would scarcely propose to alter the ordinary ceiling perhaps?—It would not be so necessary as in the larger apartment for the meeting of the House; but the same remarks, it must be remembered, apply to both. There is a great harshness and indistinctness often communicated to the voice, even in small rooms, and it is remarkable how sensitive some people are to the manner in which sound affects them. I have been in some rooms, where it was impossible to converse even with a moderate party, unless with a considerable effort from the power of reverberation. I have been in rooms where there were alcoves at one end, and whenever any individual happened to sing in a particular position it made a great difference in the voice, and on trying it experimentally, a number of persons going to a distance and shutting their eyes, while one individual, trying the experiment, walked across the room, while speaking. I have seen the others raise their hands whenever he came to a particular part, indicating the change which they all perceived. The power of the voice may perhaps be such as not to make it a matter of great consequence in these small rooms; but yet there is a very great difference in the unity and pleasantness in the tone of voice in different rooms, according to the form. I may state with reference to the same subject, there is a room not larger than some

of

of the Committee rooms may be, in which it was found almost impossible to carry on a school from the amount of reverberation, and when any individual sounded any note in a prolonged voice, it was quite like the sound of a trumpet, it was continued so long after he had ceased; that room was about 48 feet long, 20 or 30 broad, and 16 high. The roof was arched, but the curve was not great. It was improved very much by suspending curtains and drapery from the cornice.

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499. Have you ever accurately examined the present House of Commons?—I have been in it on several successive occasions, but since I came here, I have been one day at one Committee and the next day at another, and having been up several nights before I arrived, I have not had an opportunity of examining it so minutely as I would wish.

500. Do you think you have examined it sufficiently to be able to state that some alteration might be made at a small expense with a view to improve the communication of sound?—Yes; I have no hesitation in stating that, at the same time if I were asked to enter into detail on this, I should like a little further opportunity of examining the House during the debates.

Mercurii, 26° die Augusti, 1835.

BENJAMIN HAWES, ESQUIRE, IN THE CHAIR.

David Boswell Reid, Esq., M.D. again called in; and Examined.

501. HAVE you recently inspected both Houses of Parliament with respect to ventilation and the transmission of sound?—I have.

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502. Will you favour us with the result of your observations?—It appears to me that a considerable advantage might be obtained from some alterations in the House of Commons, and some of which are so very obvious that accidental circumstances must, I presume, have prevented them from having been already attended to, which would not be attended with any very great expense. There is very great interruption to the communication of sound, in the first place, from the floor not being matted, so that I have no hesitation in affirming that, for a very considerable period on one occasion when I was present, I could have heard every thing that was said distinctly had it not been from the interruption arising from the noise produced as Members were entering and going out of the House of Commons. It would be advisable to have double doors, so that as a Member may be entering, all external noise admitted by the outer door may be excluded; nor, so far as I could learn, does there appear to be any necessity for the ponderous and noisy lock, which is almost continually in action, and a constant source of interruption; as some one is always in attendance at the door, sliding doors might be introduced. The next circumstance which I would allude to in connexion with the communication of sound is, that a considerable advantage might be obtained by lowering the roof, bringing it as low as the base of the upper windows, and inclining it so as to meet in a ridge at the centre. Thin boards of wood being used instead of canvas, more body would be given to the voice; Members would not only hear distinctly, but a less effort would be required to sustain the voice at a proper pitch in a long discourse. Something of the same kind might also be introduced with advantage immediately under the gallery, boards being introduced there corresponding in their inclination with the slope of the roof.

503. What slope would you give?—Supposing it was lower, so as barely to leave room for Members walking in the gallery, then, if the roof were inclined so as to meet in a ridge not far below the present roof, a considerable advantage would be obtained. If the roof were not lowered considerably, the advantage obtained would not be so great as might be desirable.

504. What angle do you think would be desirable?—At an angle varying from 20° to 30°. Again, there appeared to be a very considerable noise introduced into the House by the number of large openings connected with the present system of ventilation; not only were the bells heard distinctly ringing at different times, but a vast number of different noises in the street produced a continual murmur that

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added considerably to the difficulty of hearing. Were the air introduced through passages, through which any sound entering in that way would have to undergo several reflections, that would exclude it to a considerable extent.

505. With reference to the rooms that are now behind the reporters' gallery, behind the Speaker's chair and behind the strangers' gallery, have you any observations to make as to them?—All those tend to diminish the power of the sound within the House; there was no difficulty in hearing any Member who spoke in a tolerably loud voice in either of those apartments, the doors of those apartments being open. If the sound that passes into those rooms were confined to the House, it would add greatly to the power of the sound in the House. The voice is more distinctly audible in some of those apartments at particular times than even in the House itself, for there the voice of the person speaking almost alone is heard, while the noise produced from the interrupting causes does not get access to it. In the reporters' gallery the interruption from the chair of the Speaker is very great, so that in numerous cases no one there was enabled to hear what was going on. There is also a recess behind the seat of the reporters which takes away from the power of the sound in the House. If their bench or seat was lowered, if the roof were lowered and inclined so as to be immediately over their seats, being carried in a sloping direction to meet the roof, I have no doubt these alterations would add materially to their power in hearing both the Speaker and Members addressing the House. On many occasions while I was in the reporters' gallery the greatest difficulty was experienced in hearing; sometimes nothing could be distinguished, a confused tone alone was heard, so that it was quite impossible for the reporters, even with every attention, to take down what was said; on other occasions the sound was very distinct.

506. With reference to the openings in the roof, have you any observations to make?—I have no particular observations to make in respect to them, for those openings are defended by the valve below from any direct loss of sound. Another source of interruption, however, which might be guarded against, is the great body of heated air which I presume rises whenever the heating apparatus is in action below. In different buildings I have had occasionally to remark, that wherever the atmosphere was preserved in a state of unity as much as possible, equal in every respect, there sound was most distinctly audible; and it occurred to me that when the current of hot air rises from those large apertures in the middle of the House of Commons, they would very likely interfere much with the communication of sound. On inquiry, one of the gentlemen now present told me he had frequently observed that it was impossible to hear individuals who were on the opposite side of this current, although those at a distance were heard distinctly where the current did not intervene. If means were taken for preventing the entrance of this large current of air at one place, and for distributing it as much as possible over a more extensive surface at the floor of the House, I have no doubt that this would not only remove the interruption alluded to by some of the Members, but also one of the causes of interruption which makes it so difficult for the Speaker to hear individuals at the bar; so that he has told me he can often hear those at a distance better than those who are near. I have no doubt that this is attributable in part to the same current of air.

507. You have stated that you thought it was desirable to have the floor of the House matted?—Yes.

508. It is also understood that you propose to introduce the warm air or fresh air through numerous small apertures in the floor, how do you reconcile the matting of the floor and leaving open those numerous small apertures?—The matting I would propose to be introduced as universally as possible over all the passages, but I do not understand that there would be any difficulty in introducing the air by numerous apertures where the floor is not matted, as in the rising from one step to another. In respect to the air admitted above, I alluded to those cases where the air is admitted without any previous preparation, I said if it was admitted without any previous preparation, I should rather have it entering from above than below, because it would be tempered in its descent by the current it met with; but if it was admitted from below, I should wish the air always brought to a fixed temperature. If the air be introduced without previous preparation, and without an exceedingly minute subdivision, I should certainly prefer it to be introduced above; but were the air introduced in the most effectual possible manner by an arrangement foreseen and provided for in the commencement of the building, then I should introduce it all by the floor, and there would be no difficulty

difficulty in getting a sufficient quantity of matting upon the floor to answer the purpose required as to the sound, leaving at different places abundance of room for the introduction of air in the very minute streams required.

509. In fact, were the matting so coarse as to admit of the ingress of heated air, and yet not sufficiently coarse to allow the feet to touch the floor, the object would be attained?—It would.

510. Is there such matting in existence?—The common bass, or any thing of that kind, will do. In temporary buildings, I have used the sugar-bags in which sugars are imported from the Mauritius and other places, made from a kind of rush. If it is contemplated that the seats are to rise in the same manner as in the present House of Commons, there will be no difficulty in the perpendicular part of introducing any amount of air; but instead of allowing it to come in through a few currents, it might be distributed and let in a thousand different parts; the whole space under the seats might be appropriated to that purpose.

511. You mean that you think, instead of having gratings merely in the passages as they now are, from which a good deal of wind comes, that the same quantity of air can flow into a pipe that went the whole length of the seats, escaping in very small quantities?—Exactly so; and thus while the same quantity of air might be admitted, or more or less, instead of coming in through an area equal to one of 20 square feet, it might be introduced by an area extended over 200 or any greater number of square feet. If the air comes in from a space where it is confined, then there must be a very rapid current, in order to supply the quantity required; but if those apertures be distributed to such an extent over the whole of the floor of the House of Commons that the same quantity of air may be introduced through an area twenty, fifty or one hundred times greater than that by which it entered before, there is not the slightest danger of any feeling of cold from that cause. If we attend to the action even of the coldest atmosphere upon the human body, as in the northern regions, it is stated there that when the atmosphere is perfectly still, no difficulty is found in walking about, unless, indeed, it is at an exceedingly low temperature; but when the wind begins to blow, instantly it becomes dangerous and almost insupportable. Accordingly, if the temperature of the prepared air be properly attended to, from the slow and gradual manner in which it must rise, it is utterly impossible for it to abstract such a quantity of heat from the human body as to make any one feel any inconvenience from it.

512. If the air be heated to a comfortable temperature, you will bear with pleasure a degree of velocity in that air which you would not be able to endure if it was either higher or lower?—Certainly; and even supposing the air to have a considerable reduction of temperature, still if that air approached with extreme slowness any individual, instead of suffering, it would be tempered so as not to produce any disagreeable effect.

513. Would persons sitting before this current you are describing, tend to increase currents?—I should think that if it were extended over a sufficiently large space, there would be abundant access for air without any current being induced in any part that might prove objectionable.

514. Do you think that the gang-ways or passage-ways and the floor, excluding the part covered by benches and the table, supposing it practicable to cover them with perforated matting so as to admit of a current of heated air, would furnish sufficient surface for the admission of warm air for the House?—So much would depend upon the nature of the matting, that it would be very difficult to give a precise answer to that question unless one had actually tried the power of the air in penetrating the matting that might be used. I should consider it probable that were matting laid down so as to cover one half of those passages, and the other were used for the admission of air at a regulated temperature and covered by wire cloth, it would be sufficient for the introduction of air throughout the whole of the House.

515. Do you think there would be any difficulty in procuring such a coarse matting as would answer that purpose?—There would be no difficulty in procuring matting such as might be necessary for the floor; but if matting were required, through which the air was to pass, and this I would not consider advisable, there would be considerable difficulty in procuring it, because the texture being naturally soft, it might wear away and spread, and the meshes would in a very short time be partially filled up.

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516. With reference to the ventilation of the present House of Commons, and the apparatus used for that purpose, do you think it sufficient?—I may state that I have never had a direct opportunity of examining it in action. I have seen all the apparatus, and the principle on which it is constructed is the same as that I formerly recommended, namely, to induce a current by the introduction of a heated atmosphere at some one point. The ventilators in the side of the House of Commons allow air to come in which does not appear to be so readily under control as might be wished, and not having an opportunity of seeing in what manner the ventilators at the top act at the time the House was full, though I attended on several occasions for this purpose, it would be impossible for me to say how far they were adequate to what they were intended for. The mode of heating, however, is very different from what I have used; a current of air is induced in the upper part by means of steam; that which I have been in the habit of employing was produced in a furnace where advantage was taken of a longer column of heated air than can be commanded by this apparatus, and of the more intense heat produced by combustion. There is another circumstance also that I would wish to mention, namely, that when the doors and windows, whether in the House of Lords or in the House of Commons, are thrown open at the request of Members, then so many cross currents are introduced which operate in so many different ways, that no one is competent under those circumstances to examine properly the power of the ventilators in all their extent.

517. If the steam cylinder that now heats the air above were moved close down to the ceiling of the House, would it operate much more actively than it does now when the air of the House has to rise to a certain point and then be heated?—It would certainly have more power the more it is depressed; the greater the height to which you can carry your column of heated air the greater the power.

518. If the steam cylinder were placed immediately over the ceiling where the air of the House of Commons escapes into the roof, there would be a much more active current produced than is now produced at the height that it is above the ceiling?—That would be the direct effect.

519. Must not the effect of opening the side windows very near the roof of the House be to supply the draught created by those ventilators from the outward air, and prevent them acting upon the House as they are intended in warm weather?—They must interfere with the ventilation by the roof; but the peculiar mode in which they interfere will depend upon so many collateral circumstances connected with the doors, windows, &c. that it would be almost impossible to say in what precise manner they would act, unless in reference to a particular case.

520. Those heated ventilators being intended to cause a draught from below, and a constant circulation of fresh air throughout the House, must not their effect be in a great measure counteracted by openings near the roof which let in the fresh air almost close to the openings of these heated cylinders?—I fully understand what is alluded to, and I should consider that they tend to act in this manner; but as it is possible that the currents of cold air from them sometimes fall down into the body of the House, and at other times enter the ventilators, according to collateral circumstances, I cannot say that they would always act so.

521. Speaking of the hot weather we have had lately, would not the effect of keeping those windows open be to diminish the circulation of the air in the body of the House?—Certainly it would, unless we suppose a strong current to rise from the House, and escape by them, the roof not being sufficient. If the same extent of ventilating surface could be obtained below, it would be infinitely preferable, and obviate the objection mentioned.

522. Even with the present extent of ventilating surface below, would it not tend to keep the House cool in hot weather, if those windows near the top were kept shut instead of open?—I am not altogether certain of that. I should apprehend that some of the windows at the top act conjointly with the ventilators in clearing the air from the body of the House. At all events, I should think it was very possible, when the doors are open below, as well as the large ventilators at the side, that they do so act.

523. With regard to the present temporary House of Commons, its size and the number of Members that may be assembled together at any one time, do you think that the present ventilating apparatus is sufficiently extensive?—I should consider that it would be a great improvement to extend it.

524. To extend the apparatus, and to close at the same time all apertures at the sides of the building, that is, the windows?—Yes. *D. B. Reid*, Esq M.D., F.R.S.E.

525. So as always to ensure a supply of fresh air being taken from the lower part of the building?—Yes; but always taking into consideration, if the sides are entirely closed, and the air admitted below at a regulated temperature, it would be well to introduce it. 26 August 1835.

526. Have you any sketch to submit to the Committee, in order to exhibit the proposed form of a House the most favourable for sound as well as for ventilation?—I had intended to have submitted a complete sketch to the Committee on this occasion, but my attendance upon the different Committees, revising my evidence, and my attendance at the Houses of Lords and Commons, has so completely engrossed my time since I came here, that I have found it impossible to do any thing but make out a prospective outline with a pencil; but this will show every thing required to illustrate the principles to which I referred, both with respect to the new and the present House of Commons.

[*The Witness delivered in a Sketch, and explained it to the Committee.*]

Sir *Robert Smirke*, called in; and Examined. Sir *Robert Smirke*

527. HAVING heard what Dr. Reid suggests with respect to the present House, do you think there would be any great difficulty in making a false ceiling of the kind described with glazed openings to let in the light, so as to try the experiment, whether it would improve the sound?—There can be no practical difficulty in making such a ceiling, but it would require consideration to adapt it well to the situation, as described by Dr. Reid; and it would cause a material alteration in some parts of the House that are not immediately connected with the ceiling.

528. In what respect?—All that end behind the Speaker's chair must be altered, in order to be adapted to such a ceiling, and also the gallery in which the strangers are, for their seats rising nearly to the windows, they would be so near the ceiling that I apprehend they would suffer great inconvenience from it; it would require the room to be built expressly for such a plan; but I am mentioning only the impression that is produced on my mind by a very slight consideration of Dr. Reid's remarks.

529. Assuming the ventilation to be more perfect than it is, do you think that strangers would then suffer inconvenience from being placed near the roof?—Not if sufficient means of ventilation could be applied, but I think it would be difficult to supply the air to a number of persons closely seated in such a situation, sufficiently to prevent their feeling great inconvenience.

530. Would not the form of the roof facilitate the transmission of the air?—Not from the strangers' gallery.

531. The proposition is, that the roof should be slanting, and with slanting gable ends?—The difficulties I allude to arise from the circumstances of the present House, not from the theory of the subject.

532. Assuming an artificial roof was introduced into the present House, and that roof was terminated by two gable ends slanting inwards, do you think there would be any difficulty in regard to the strangers' gallery then?—There would be difficulty in supplying their seats with air in the same manner as the Members' seats.

533. Could not the air be conveyed to them precisely in the same way, only carried up by means of pipes?—By the alterations of the present House it might be done, but not without some material alterations.

534. Do you think that the practical difficulty, considering the expense at the same time, would be a sufficient objection to prevent trying the experiment?—There is no practical difficulty, as far as the construction of the work is concerned, I make the objection on account of the alterations it would necessarily require; it appears to me it would require a considerable alteration of the House.

535. Supposing this interior roof was to be constructed, what effect would it have upon the strangers, so far as viewing the House is concerned?—I do not see that it would affect their view of the House.

536. Do you recollect how much less the width of the reporters' gallery is than the width of the whole House?—The reporters' gallery is about 21 feet wide, and the width of the House 38 feet.

537. A sloping ceiling might be introduced without the same inconvenience you were speaking of, as far as the edge of the reporters' gallery, leaving a less space of

Sir *Robert Smirke.*

26 August 1835.

of horizontal ceiling than at present?—A slanting ceiling might be made from the base of the present windows all round, without altering the galleries.

538. Having heard the evidence of Dr. Reid, do you think that the alterations he proposes could be carried sufficiently into effect as to give a fair trial to the principles upon which Dr. Reid has founded his plan?—I think there would be great difficulty in carrying them into effect in the present House.

539. Do you mean it would be difficult from the expense?—From the expense, on account of the building not being adapted to arrangements of that nature without great alteration.

540. What are the difficulties you consider likely to arise?—I cannot state them all without hearing again the evidence; I cannot carry in my mind all the points which have been alluded to.

541. Having heard the alterations proposed by Dr. Reid, in reference to the sloping roof, do you think there would be great practical difficulties in the way of making the alterations, in order to try the experiment, considering that a new House is to be built, and that something in the way of experiment should be tried previously?—I have great doubts about the expediency of trying such an experiment upon the ceiling; but I should wish to have time given to me to consider the answer to this question.

Veneris, 28° die Augusti, 1835.

BENJAMIN HAWES, ESQUIRE, IN THE CHAIR.

Sir *Robert Smirke*, again called in; and Examined.

Sir *Robert Smirke.*

28 August 1835.

542. AT your last examination you were asked what were the difficulties you considered likely to prevent altering the interior of the present House of Commons, upon the plan proposed by Dr. Reid, and you requested time to consider before you gave your answer; will you favour the Committee with your opinion upon that subject now?—As the inquiry was a very important one, I thought it advisable to state in writing those opinions which I wish to submit to the Committee; and with your permission I will read them. The causes of defective hearing in the present temporary House, described by Dr. Reid in his evidence to the Committee on the 26th, are—the want of matting; the noise of Members passing along the floor, opening and shutting the door into the lobby, by which external noise is admitted, and the sound of a large and heavy lock to the door; the height of the room, and the means by which air is now introduced into it. Of these causes, the first may, of course, be readily obviated; and the noise of the door and external sounds would be lessened by adopting the double doors recommended by Dr. Reid, and by the removal of the large lock. I apprehend, however, that some inconvenience would be frequently given to Members by having to use the double doors; and in respect of the heavy lock, it was provided by the express order of the Serjeant-at-Arms, who required that it should be heard, the light one originally fixed being considered by him as unsuitable to the purpose. The proposition made by Dr. Reid for lowering the ceiling, bringing it down below the present windows, is one about which I feel great reluctance in offering an opinion, and which I cannot venture to take upon myself the responsibility of recommending the Committee to adopt. As, according to this proposition, the House would be lighted only by internal borrowed lights in the ceiling, I should fear there may be an inconvenient want of light, except on very fine and clear days, and I apprehend that the want of some direct and free communication with the open air might sometimes be found objectionable. I think it would also be extremely difficult, in the present temporary House, to introduce from the vaults below pure air in sufficient quantity, and tempered in such a manner as to give no inconvenience to Members when a considerable number of them were assembled in a room so low as this would be made. Should the experiment fail, or succeed imperfectly, from any difficulties in the application of the principle, or in the management of the process in regard to the preparation and introduction of the air, the inconvenience of any failure, under such circumstances, during the session of Parliament, would be

be very serious; and I am therefore of opinion that it would be most desirable to try such an experiment first upon a less extensive scale, and in a room of less importance. The air for ventilation is at this time introduced into the House at seventy-eight different places, but, from the difficulty of regulating its temperature and velocity, Members often complain of inconvenience from it, and close all the apertures near them. Should it, however, be decided that the propositions made by Dr. Reid be adopted in the House, I beg leave to suggest to the Committee, in order to ensure the complete and efficient execution of his plan in all its details, that it should be executed under his own immediate directions and superintendence, in the same manner as the recommendations made some years ago by Sir H. Davy for a similar object were superintended by him, and as those also made at a subsequent time by Mons. Chabaunes were carried into execution in both Houses of Parliament under his own direction. I shall, at the same time, be most ready to undertake that the work, whatever Dr. Reid directs to be done under the sanction of the Committee, shall be executed in a correct and proper manner.

543. You appear to apprehend from the statement you have made, that great practical inconvenience would arise from lowering the roof in the way proposed by Dr. Reid?—I do.

544. What would be the difference between the height of the room were the ceilings so lowered, and the height of the old House of Commons from the floor to the ceiling?—The height of the old House of Commons was 26 feet and a half, the height from the floor to the sill of the windows in the present House (the level to which it is proposed by Dr. Reid to be lowered) is 23 feet and a half.

545. Do you think that the artificial ceiling proposed by Dr. Reid could or could not be made, so as to try the experiment without the probability of great inconvenience, that is to say, by making it in parts, and putting it together so that it might be readily taken down were positive and serious inconvenience felt?—It would be a work of great difficulty; I am not prepared to say it is impracticable.

546. Would the difficulty rather resolve itself into that of expense than that of any other kind?—Both expense and difficulty of execution.

547. With reference to trying the experiment in some other room, where would you propose the experiment should be tried so as to give us results we might rely upon, with reference to the House of Commons?—I cannot say I know of any room at present in which it could be applied.

548. If any experiments are tried they ought to be tried in the House of Commons itself, in order to give us any thing like certainty of the utility of the result?—I should be very much afraid of trying so hazardous an experiment upon such a room.

549. How would it be possible to get any thing like certain information upon the subjects of sound and ventilation without some experimental trials, and where do you think a better opportunity is likely to be found than in the present temporary House of Commons?—I am not able to propose any place where the experiment could be made; at the same time I can only repeat that, there being so many difficulties in the ventilation of the House of Commons, I should be afraid of making the trial there.

550. Under the supposition that the roof was altered in the way proposed, will you state what the difficulties in the way of ventilation would consist in?—I do not know how the air is to be introduced so as to give the necessary degree of ventilation without personal inconvenience to the Members.

551. Supposing the alteration in the ceiling to take place, do you think there must necessarily be made some alteration in the mode of supplying the House with air?—I think there must.

552. Will you state why?—I do not think, in the present state of the House, the admission of air is satisfactory, as Members seated near the places open for the admission of air complain of it and close them; and if its free admission were checked in the same manner when the ceiling was lowered, the inconvenience from defective ventilation would be much more seriously felt.

553. Assuming the ventilation to remain the same, do you think that the lowering of the ceiling would increase the inconvenience felt?—I do.

554. Will you state why?—The current will be greater, or the number of apertures must be increased.

555. Why will it be greater?—Because it would be necessary to force the circulation

Sir *Robert Smirke.*

28 August 1835.

culation and ensure the adequate supply of air, as none would be admitted except from the floor. It is extremely difficult to state with certainty at what rate air can be introduced and carried away without inconvenience, especially where there are so many disturbing causes as in a room of that kind, but it appeared to me from the best observations I could make with an accurate air gauge, that at this time a quantity of air was drawn out equal to the whole contents of the House in about 40 minutes; if the velocity were increased in order to bring a greater body of air through the House, I should not know how to prevent the current of air from being more troublesome than it is described to be now.

556. How would the current be increased by the alteration?—The current or quantity of air through the apertures must be increased in order to give a greater and more uniform and certain flow of air through the House than there is at present. The want of that is now occasionally supplied by air from the windows, but these would be wholly closed.

557. Would not the increasing the number of apertures increase the supply of air, without necessarily increasing the velocity of the current?—It would; if means can be taken at the same time to prevent the partial closing of them by Members seated near them.

558. Might not the number of apertures be increased in the present House, without inconvenience, for that purpose?—I think not without some inconvenience to the Members.

559. Might not an additional number of apertures be made in the floor?—Yes.

560. Might not an additional number of apertures be made under the seats?—Yes.

561. Do you not then think a sufficient number of apertures might be made to increase the supply?—I think wherever those apertures were, the Members near them would complain, unless that air was introduced in such a tempered state as to prevent their being sensible of it, but I do not know how to regulate that; some Members go to the House in an open carriage, and enter it rather chilled; others are seen galloping there on horseback, and entering very much heated; I do not know that the air can be so tempered and regulated as to be agreeable to the feelings of persons in so very different a state.

562. Assuming that the supply of air could be rendered of equal temperature, then your objections on that score would cease?—Yes.

563. Now with regard to the light which you assume would be materially reduced by the lowering of the ceiling in the way proposed, do you conceive that the light, under the circumstances assumed, would be less than that which was given to the Members in the old House of Commons?—I think so.

564. Can you at all inform the Committee the comparative area for the admission of light between the present and the old House of Commons?—No, I cannot; but in the body of the old House there was a large body of light introduced behind the Speaker's chair, which diffused itself generally over the House; the present windows are raised at a great height from the floor, and do not give the same direct light they would do if placed as they were in the old House.

565. The windows in the old House of Commons faced the east?—Yes, the principal windows, and there were also small ones on the side.

566. And a certain number of windows in the present House face the west?—Yes.

567. The sittings of the House take place principally in the afternoon, with reference to the supply of daylight?—Yes.

568. Do you not think that those windows facing the west, added to the others, and considering that they are without surrounding houses, and nothing to intercept the light, might, without inconvenience, admit of a reduction?—They might admit of a reduction, but not of such a reduction as that proposed, unless glass was introduced in very considerable quantities in the ceiling.

569. Would there be any objection to the introduction of glass in considerable quantity except on the score of expense?—The difficulty of keeping a large surface of glass clean in that situation would be very great.

570. Do you think the objections are of such a nature as to prevent such an experiment being made?—They make me unwilling to recommend it for trial in so important a building as this; I should wish to see the trial first made where there would be less inconvenience occasioned in the case of partial difficulties or failure.

571. Where

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571. Where and how would you recommend such an experiment to be made, in order to give us results we could rely upon?—I am not prepared to say where the experiment could be made, but it is very possible such a place might be selected.

572. Where all things are similar to the House of Commons or the House of Lords?—No, certainly not.

573. Would there be any difficulty in lighting the present House of Commons by lanterns with nearly upright sides, which would not be subject to the objection of accumulating dirt?—Yes, there would; the top of the roof is considerably above the ceiling, and the lantern would be so elevated as to give very little light below.

574. It would require considerable alteration to light the House in such a manner?—Yes, and it would be wholly incompatible with the principle of Dr. Reid's plan.

575. What do you conceive to be the best method of lighting the House—not the present method?—No; the windows were there; I used the openings I found in the old walls.

576. Having read the evidence of Dr. Reid, you are aware that the alterations he proposes are founded upon alterations which have been made in existing buildings, and found to be successful?—I am not aware of that, from any circumstance mentioned in his evidence; I did not perceive in his evidence reference made to any particular building where the same principles had been adopted which he recommends here.

David Boswell Reid, Esq., M.D., F.R.S.E., again called in; and Examined.

D. B. Reid, Esq. M.D., F.R.S.E.

577. WILL you state to the Committee the buildings in which you have made alterations upon the principles you now recommend to be adopted in the House of Commons?—I cannot say that there are any buildings in which alterations have been projected under precisely the same circumstances we see in the House of Commons, but the large rooms have been projected and built upon a plan similar, in most respects, to that proposed for altering the House of Commons, and there is at present a church in which alterations are making similar, in some respects, to those recommended in the House of Commons. In my former evidence, I do not at the moment recollect to have alluded to alterations of churches having been made precisely under the circumstances you mention.

578. But your lecture-room, for instance, is a room in which large numbers assemble, and which you have found is very favourable for hearing in all parts?—Yes, it is; and the principle upon which the alterations are recommended are precisely similar to what I have seen practically adopted in buildings of different kinds, though those were in general constructed on that plan from the commencement.

579. Can you state any buildings that have been altered, and successfully altered, under your directions?—There has been an alteration made in one of the churches in Edinburgh; I have not visited it since the alteration was effected, but I have been told by all the members of the Committee that it has been attended with good effect. There is at present a church altering in Glasgow, where they are changing the whole of the roof upon the evidence that the Committee had submitted to them from me, after examining my own buildings and others to which I referred them; but that alteration is not yet completed so far as I am aware.

580. Have you found by the alterations made, the ventilation materially or injuriously affected?—In no building that I have been engaged with have I ever had an opportunity of directing the arrangements for the ventilation and the communication of sound at the same time where alterations were required.

581. Have you any statement you wish to make to the Committee in addition to what you have communicated?—Nothing in addition to what I have already stated, except that I should wish to mention before the Committee what I have mentioned to several Members individually. When we consider the immense sums expended every year in public buildings throughout the country, both by the Government and otherwise, would it not be important that an application be made to Government to devote some small sum in the erection of a building where any additional evidence as to sound and ventilation might be obtained by actual experiment; not that I feel the slightest hesitation with respect to what I have recommended, but principally, because it would give the Committee the most perfect confidence in recommending any particular plan to be specially attended to, if

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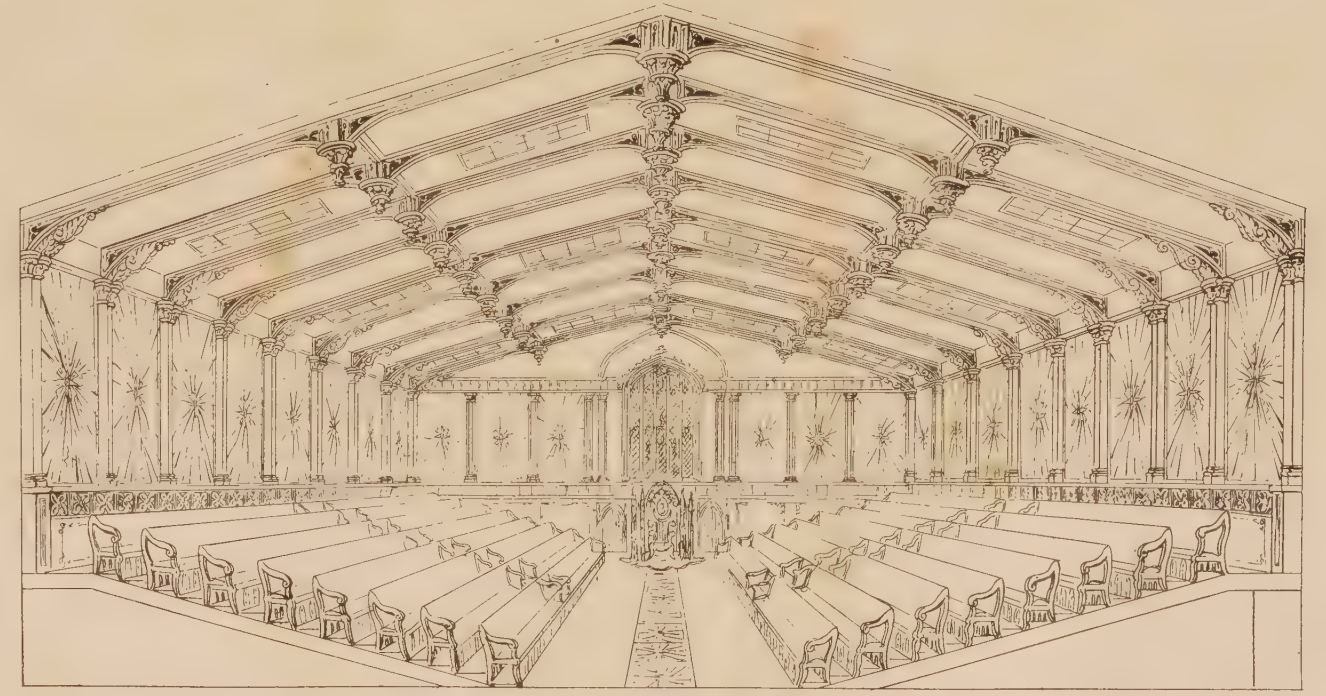
28 August 1835.

they could actually set it in operation, in what might be termed a model of the new House of Commons. I do not know what the experiment might be tried for here, but in Edinburgh, were we to confine ourselves to the principle alone, and not to trouble ourselves with ornament, except where we chose to try some experimental illustration, I have no hesitation in saying that the sum of 1,000*l.* or 2,000*l.* would be abundantly sufficient for that purpose, and were another 1,000*l.* added to it, the building might after all be rendered permanent, and used either as a church, a hall of assembly, a lecture room, or in any other way that might be preferred; but I do not press this at all upon the attention of the Committee.

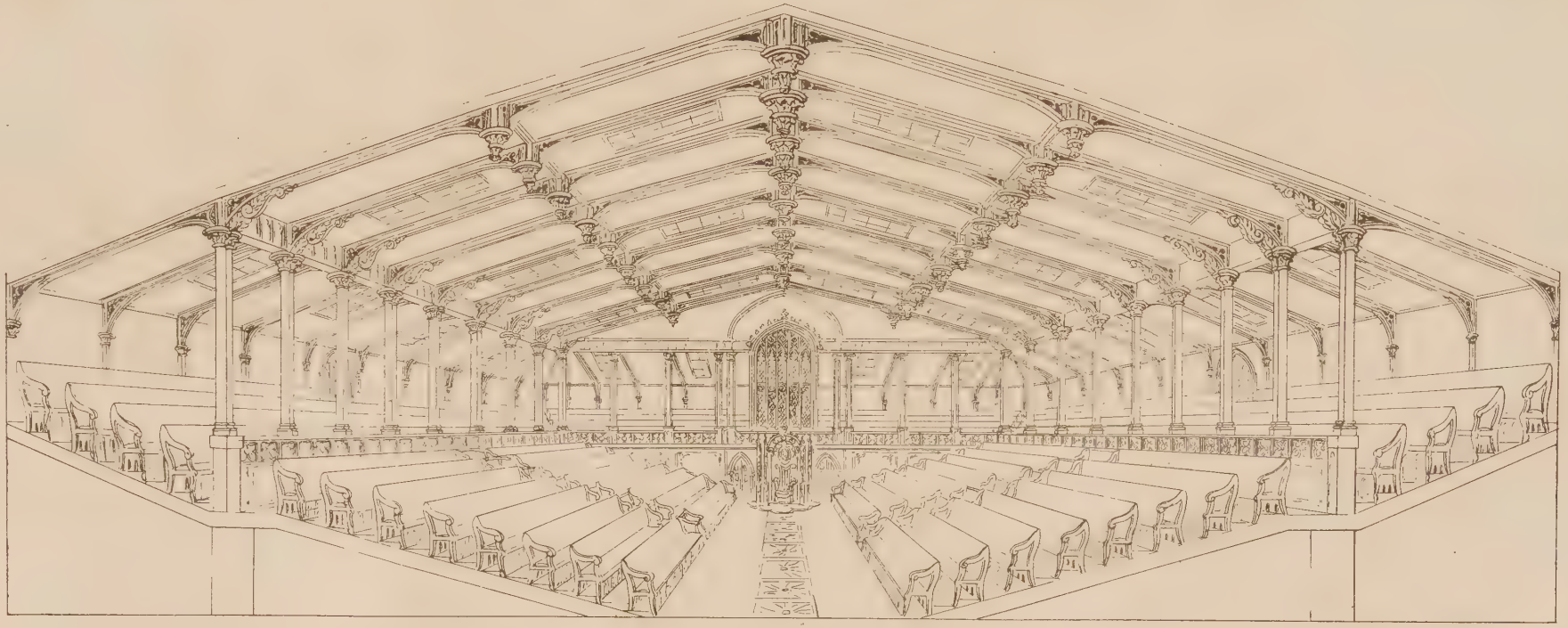
PLANS.

Five SKETCHES, illustrative of Dr. *D. B. Reid*'s Evidence.

A SKETCH, illustrative of Mr. *Sylvester*'s Evidence.

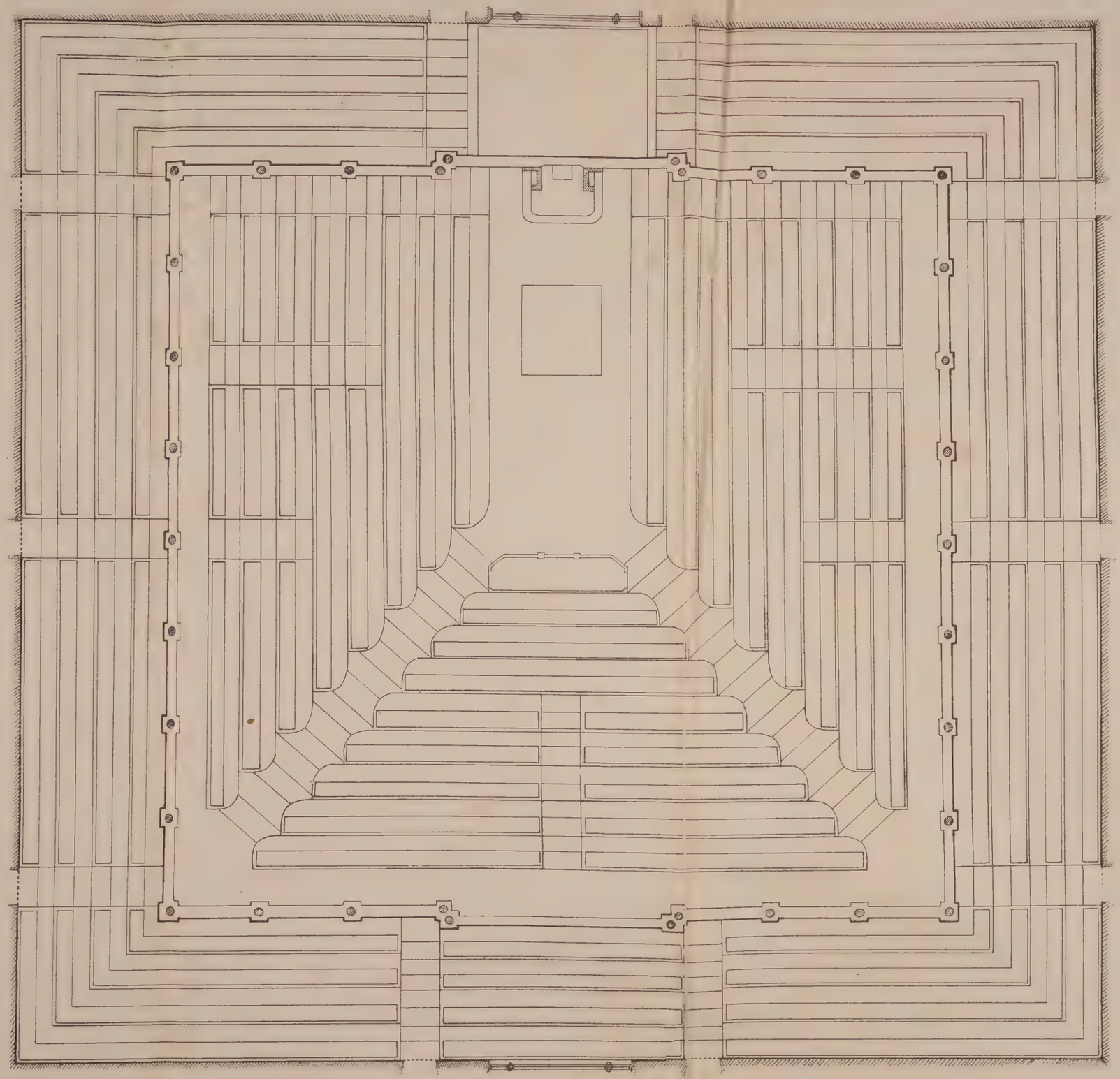


Perspective View of the Interior of a new House of Commons, containing the required number of Seats in the Body of the House, and constructed in the manner recommended by Dr. D. B. Reid. — The air is supposed to be admitted at a regulated temperature by the Iron grating along the floor, and also at the Back and lower part of every seat along its whole extent. — See No. IV.



10 5 0 10 20 30 40 50 60 70 80 90 100 FEET

The Body of the House as in N.° 1. the Curtains or moveable frame-work being pulled up between the Pillars, so as to render all or any part of the Gallery available when the House is very full, and arranged with the required number of Seats.



Ground Plan, showing an Arrangement of Seat, different from what is represented in Numbers 1. & 2.

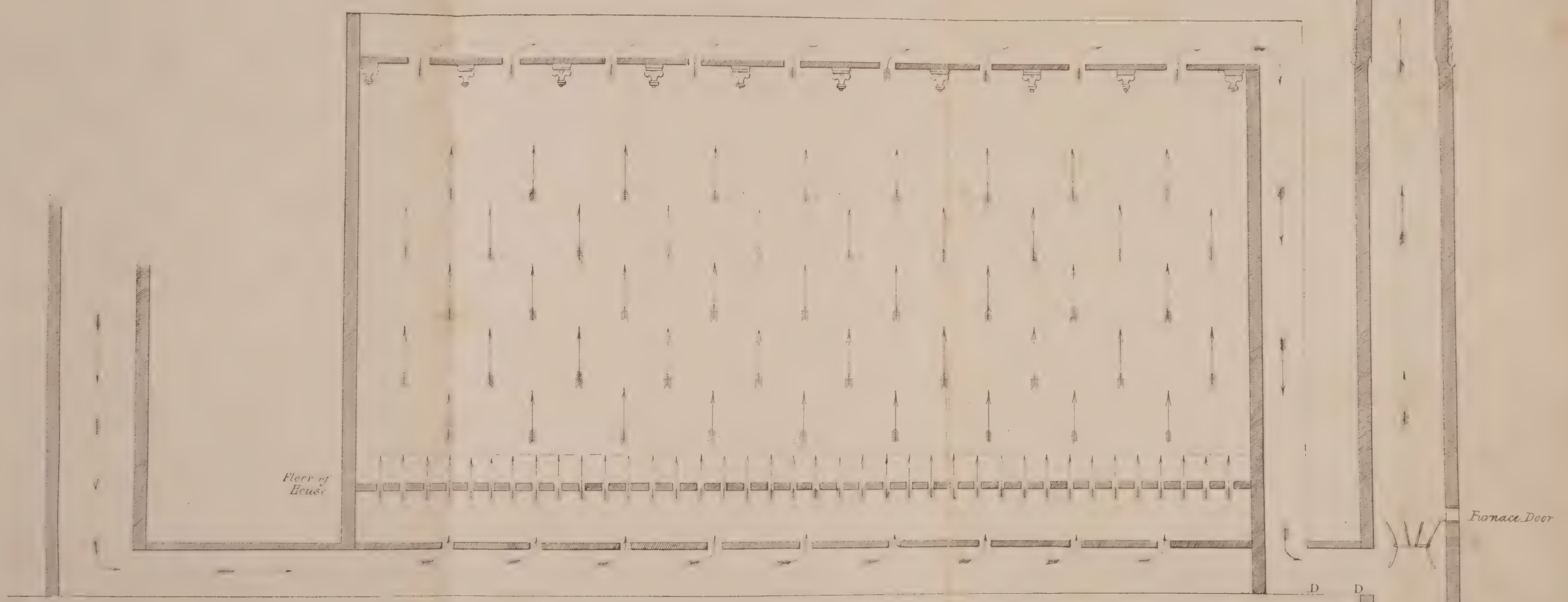
10 5 0 10 20 30 40 50 60 70 80 90 100 Feet

J Basire lithog.

583. Ordered by the House of Commons to be Printed 2d. Sept. 1835.

James & Luke G. Hansard & Sons, Printers

SKETCH
Illustrative of the
SYSTEM OF VENTILATION
Recommended.



The air enters at the turret on the left, and is heated or cooled to the required temperature by hot or cold water pipes, or otherwise, below the floor of the House, or in any adjoining apartment. From the main trunk below, the air is either allowed to escape, diffusing itself equally below the whole of the floor, or led away by separate tubes, so as to ascend with the same equal flow, whether entering by numerous small apertures in the grating along the floor, or below each individual seat along its whole extent. The row of arrows represent the apertures by which the prepared air enters the body of the House, whether along the floor, or below any single bench. Ventilating apertures placed between each pendant in the roof remove the air as it rises, which now descends as is represented, till led into the chimney: the furnace at the bottom, though small, being capable of working the whole of the Ventilating apparatus. At DD two doors are placed, by opening or shutting which, according to the state of the furnace, the velocity of the current from and into the House may be increased or diminished almost to any extent, in an instant. The furnace is worked with coke alone, the doors, DD, being shut on kindling it, and air admitted for a short time by the Ash-pit doors.

Delicate but large thermometers, placed within the House, and also in the main ventilating pipes, as they enter and leave it, guide the attendants, and are, at the same time, a complete check upon the regularity with which every part of the operation is carried on.

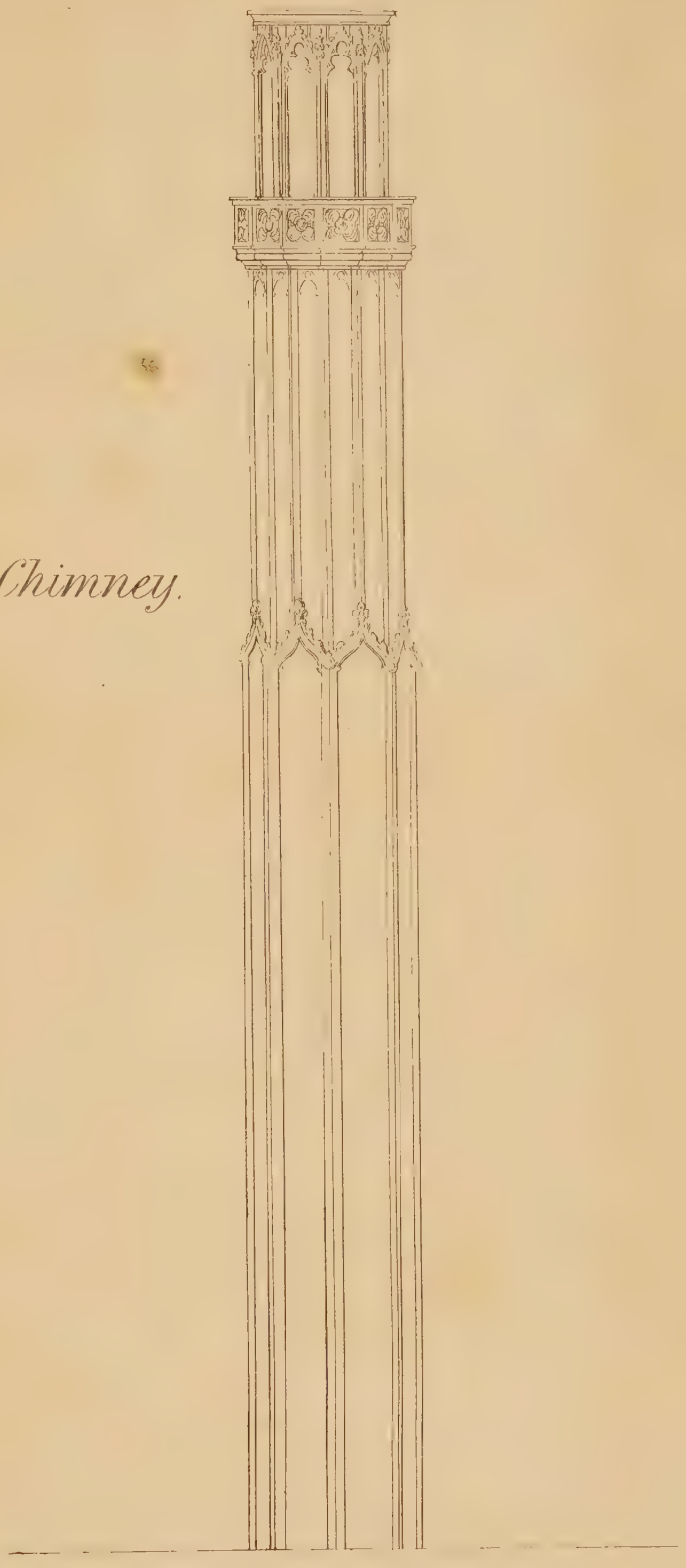
The Ventilating apparatus is not used while the House is merely warming, as before it is opened for the admission of Members in the morning.

If the air be already pure within, instead of drawing in fresh air by the turret especially erected for this purpose, arrangements ought to be made for leading the air from the descending flue to the heating chamber, doors being provided to cut off all communication with the turrets, while the circulation is maintained between the air in the House and the heating apparatus alone. It will then be heated speedily, and the Ventilating apparatus brought into play whenever the air begins to be vitiated.

583. Ordered by the House of Commons to be Printed 2nd Sept. 1835

THE

Ventilating Chimney.



The furnace in the Chimney being worked with coke (and not with coal) no smoke will be perceived.
at any time, and any figure, as that of a turret, may be given to it in unison with the rest of the building.

The turret for the admission of air can be placed high or low, according to the source from which the air is obtained.

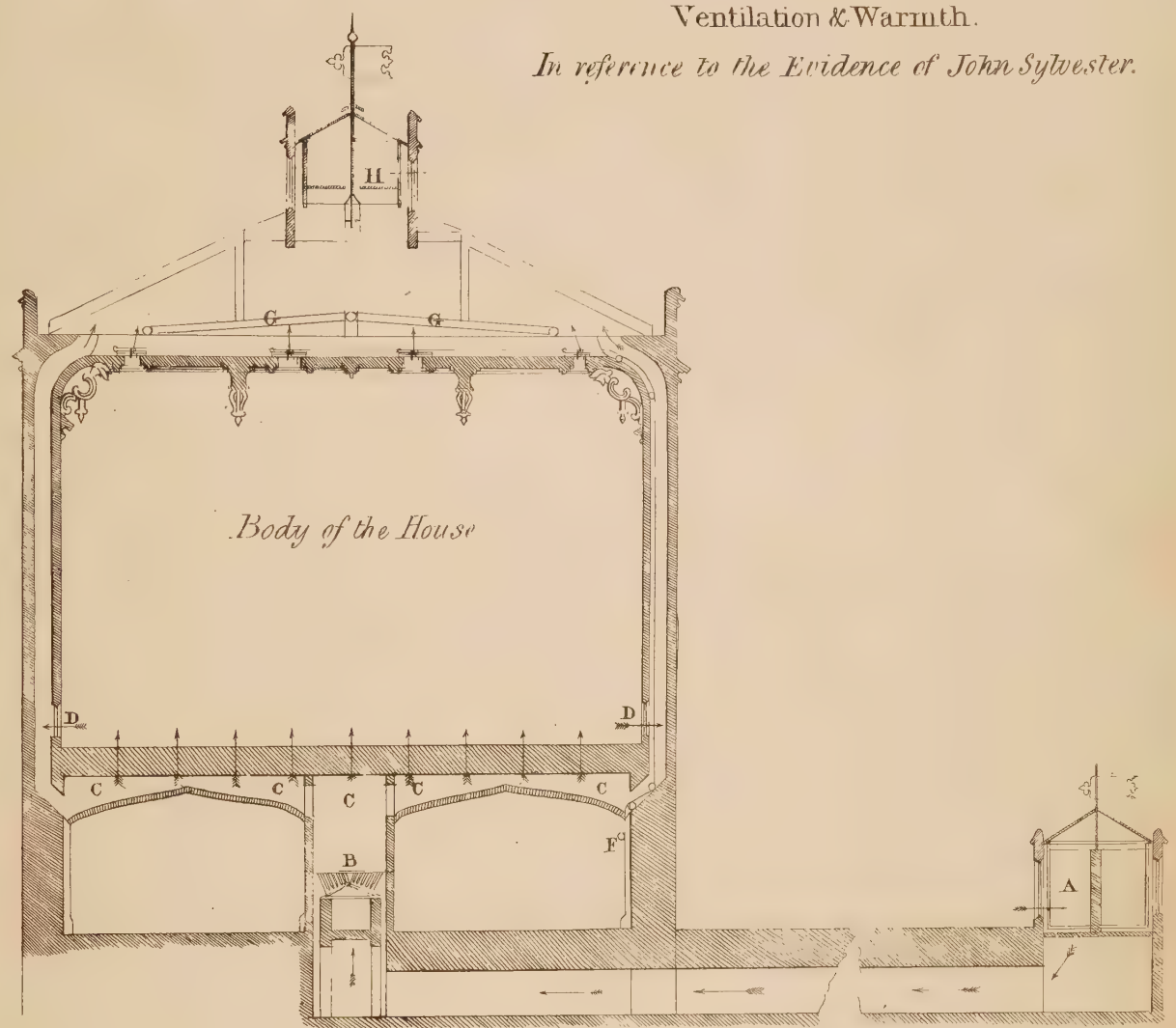
The air ought always to be taken at some little height from the ground; as, independent of other circumstances, air taken from the surface of the ground is, on a clear evening always, colder than the superincumbent air.

583 Ordered by the House of Commons to be Printed 2nd Sept. 1835.
James & Luke G. Hansard & Sons Printers

J. Basire lithog

TRANSVERSE SECTION

Showing the Arrangement for
Ventilation & Warmth.
In reference to the Evidence of John Sylvester.



A, *The Shaft and Cowl, communicating with the underground Channel for the supply of fresh air.*

B, *Air warming Apparatus.*

C, C, C, *Air Chamber, in communication with the apertures disposed as much as possible, over the whole area of the floor.*

D, D, *Openings for the discharge of vitiated air when it is necessary to supply the fresh air at a higher temperature than the compound in the body of the House.*

E, E, E, E, *Openings in the ceiling for the discharge of vitiated air when the fresh air is to be introduced at a lower temperature than that in the body of the House, which can be shut or opened at pleasure by the means E, in the basement story.*

G, G, *Heated Pipes for raising the temperature of the air in the cavity of the roof to a higher temperature than that existing in the body of the House at any time.*

H, *Outlet for the escape of vitiated air open to the cavity of the roof and the atmosphere, and protected from the wind by means of a cowl.*

583. Ordered by the House of Commons to be Printed 2nd Sept.r 1835.
J. Basire lithog.
James & Luke G. Hansard and Sons Printers.

REPORT

FROM

SELECT COMMITTEE

ON THE

VENTILATION

OF THE

HOUSES OF PARLIAMENT;

WITH THE

MINUTES OF EVIDENCE.

Ordered, by The House of Commons, *to be Printed,*
2 *September* 1835.

583.

REPORT

FROM

SELECT COMMITTEE

ON

HOUSES OF PARLIAMENT;

WITH THE

MINUTES OF EVIDENCE.

Ordered, by The House of Commons, *to be Printed,*
9 *May* 1836.

Martis, 9° die Februarii, 1836.

Ordered,

That a Select Committee be appointed to consider and report on such Plan as may be most fitting and convenient for the permanent Accommodation of The Houses of Parliament:—And a Committee was appointed of—

Mr. Chancellor of the Exchequer.	Mr. Ridley Colborne.
Sir Robert Peel.	Sir Charles Burrell.
Lord John Russell.	Sir Robert Inglis.
The Marquis of Chandos.	Mr. Williams Wynn.
Lord Stanley.	Mr. Tracy.
Sir John Hobhouse.	Mr. Warburton.
Sir James Graham.	Sir George Clerk.
Lord Francis Egerton.	Mr. Hughes Hughes.
Sir Richard Vyvyan.	Mr. Bannerman.
Mr. O'Connell.	Lord Granville Somerset.
Mr. Hume.	Lord Viscount Howick.
Sir Harry Verney.	Mr. Bernal.

Ordered, That Five be the Quorum of the Committee.

Martis, 15° die Martii, 1836.

Ordered, That the Committee have Power to report from time to time to the House.

Lunæ, 9° die Maii, 1836.

Ordered, That the Committee have Power to report the Minutes of the Evidence taken before them to the House.

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REPORT.

THE SELECT COMMITTEE appointed to consider and report from time to time on such Plan as may be most fitting and convenient for the permanent Accommodation of The Houses of Parliament;——HAVE further considered the matters referred to them, and have agreed to the following REPORT:—

YOUR Committee consider themselves to be warranted in recommending for the adoption of The House the Plan marked No. 64, which is the Plan to which the first Premium was awarded by the Commissioners appointed to consider the Plans for building the New Houses of Parliament, subsequently to that Award, some alterations in the Plan have been made, at the suggestion of the Commissioners and of the Architect himself, which, in the opinion of Your Committee, are calculated materially to improve the Plan.

Your Committee, however, recommend the adoption of the Plan only on the express understanding that it can be executed for a sum not exceeding by any considerable amount the Estimate submitted to them by Mr. Barry, that is to say, £.724,986.

It does not appear to Your Committee that it would be safe or expedient to engage in a work of such magnitude and importance until a due and accurate Estimate, founded on detailed Specifications, and working Drawings, shall have been made and carefully examined, and approved by competent authority.

Your Committee would therefore suggest, that such Specifications and working Drawings should be forthwith prepared by Mr. Barry, under the direction of His Majesty's Government, in order that the close Estimate founded on those Specifications may be submitted to Parliament at the commencement of the ensuing Session.

Your Committee are of opinion, that it will be desirable to postpone altogether the consideration of the principle on which Remuneration should be made to the Architect for superintending the execution of the Plan in the event of its ultimate adoption. They think that the preliminary employment of the Architect in preparing the working Drawings, detailed Specifications and Estimate, and also his remuneration for that specific service, should be considered apart from the subsequent arrangements, which the final adoption of his Plan would render necessary.

Your Committee, finding that it would be very difficult for them to calculate either the period of time requisite for preparing the Plan and Specifications, or the expense which the Architect might incur in the employment of subordinate persons during the course of their preparation, are of opinion, that it will be advisable to leave the amount of remuneration for this specific service to be hereafter determined by the Government. In this arrangement Mr. Barry entirely acquiesces.

9 *May* 1836.

LIST OF WITNESSES.

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MINUTES OF EVIDENCE.

Jovis, 10° *die Martii*, 1836.

MEMBERS PRESENT.

Sir John Hobhouse.
Mr. Chancellor of Exchequer.
Sir Robert Peel.
Sir James Graham.
Lord Francis Egerton.
Mr. Hume.
Sir Harry Verney.
Mr. Ridley Colborne.
Mr. Williams Wynn.
Mr. Tracy.
Mr. Warburton.
Sir George Clerk.
Mr. Hughes Hughes.
Lord Viscount Howick.
Mr. Bernal.

SIR JOHN HOBHOUSE, IN THE CHAIR.

Charles Hanbury Tracy, Esq. M.P.; Hon. Sir *Edward Cust*; Hon. *Thomas Liddell*; and *George Vivian*, Esq., the Commissioners appointed to consider the Plans for building the Houses of Parliament, Examined.

C. H. Tracy, Esq. M.P., Hon. Sir *E. Cust*, Hon. *T. Liddell*, and *G. Vivian*, Esq.

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1. Mr. *Bernal* to Mr. *Tracy*.] HAS the result of the opinion of the Commissioners, as to the preference of one particular plan, proceeded from their conviction of the superior merit of the internal arrangements, and of the beauty of the external architecture?—Unquestionably.

2. They considered that the convenience and accommodation afforded by the internal ground-plan was so decidedly superior to that of any other?—No, I do not say that. I understood the former question to regard not only the ground-plan, but the general design; and putting the two together, I have no hesitation in saying that the plan of Mr. Barry is far superior to any other plan that has been submitted to the commissioners.

3. Combining the two?—Combining the two. The Committee are perfectly aware, I am sure, that it is quite impossible to consider internal arrangements but with reference to the elevations, and that an architect must occasionally make some sacrifice in one or the other, or in both, in forming his design. There can be no architectural plan without some defect. A near approach to perfection is all that can be expected.

4. Mr. *Chancellor of the Exchequer*.] When you speak of a sacrifice made of some portion of the internal accommodation in reference to the elevation, do you conceive that any of the requirements which were contained in the former Report, for the internal accommodation of the Houses of Parliament, are sacrificed in the plan of Mr. Barry?—I think not.

5. That plan, then, in your judgment, complies with all the conditions which were imposed upon the architect by those former resolutions?—Unquestionably.

6. Mr. *Hughes*.] Does not the same remark apply to all the plans submitted by the architects, that the requirements of The House are provided for in each?—It does equally so.

7. The Committee wish to know whether, in looking at these plans, they may consider that the requirements are observed in all?—Yes, I should say generally.

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8. So that it need not be an ingredient of their inquiry as to which of the plans is adopted; the same requirements are provided for in all?—I think not. But I should mention that in one of the selections that was made, that of Plan 13, Mr. Hamilton had provided all that was required by the first instructions delivered by the Office of Woods, but afterwards there came out fresh instructions, which Mr. Hamilton states in his memoranda he had not sufficient time to comply with. They regarded the accommodation for the Serjeant-at-arms. But it was very evident to the Commissioners that Mr. Hamilton could easily have complied with the requirements had time permitted.

9. Do you mean No. 13?—No. 13.

10. Lord *Howick.*] In proceeding to examine these plans, you inquired, not only whether they contained the various rooms and offices specified by the Reports of the Committees of the Two Houses, but you also had reference to the convenience of the arrangements with respect to each other, and whether they would answer all the purposes which we had in view in that manner?—Certainly; I laid down certain rules to guide me in determining the merits of each plan. These rules regarded the general disposition and convenience of the several entrances, and of the different communications of the interior; the situation of different offices; the situation of the Houses with respect to each other; the communications to them, private and public; the situation of libraries, committee and refreshment-rooms, and the various conveniences required.

11. Then having settled in your own mind certain requirements that each different plan was to answer, you proceeded in examining them each in detail, to make memorandums as to how far each number in these different respects were good or bad?—Exactly so.

12. And then, upon the comparison of the whole result of the different opinions, you made a general estimate of which was the best plan?—After examining a plan and weighing the objections to it, we decided upon its general merits as a design compared with those of other competitors.

13. Was the probable expense of executing different plans any element of your consideration?—None at all; but having heard a great deal said about the expense of Mr. Barry's design, that it was more extravagant than any other, I turned my attention a good deal more to the subject than I otherwise should have done. The result was, that I felt perfectly convinced, after looking at the design with attention, that the plan by Mr. Barry was by no means so extravagant as a number of others of inferior merit. In fact, I see no reason to believe that it will be at all an extravagant plan to adopt.

14. Lord *Francis Egerton.*] You make mention of Mr. Barry's plan; do you mean to imply you knew it to be Mr. Barry's plan at the time you considered it?—In answer to that question, I must say that I never had the pleasure of seeing but one design of Mr. Barry's in my life; I knew nothing of his style, and was not even personally acquainted with him; but I had heard so much of the merits of his plan, when No. 64 passed in review, which was not till I had seen the greater number of those which were submitted to us, I certainly had a strong suspicion from the beauty of it that it could be no other than Mr. Barry's; but I had nothing in the world to lead me to this belief excepting the superiority of the design. Neither had I a knowledge, from looking at the plans of the authors, of any of them; I made a guess, it is true, at one or two; but in each conjecture I was mistaken. ——[Sir *Edward Cust.*] I should like to add, as I am the only one of the four Commissioners who had a personal knowledge of Mr. Barry before we entered upon our duties, that immediately upon my receiving the intimation that my name was to be proposed as one of the Commissioners, I signified to Mr. Barry my desire that we might have no communication with each other pending the inquiry, and that whenever we might meet, the subject of the plans of the Houses of Parliament should never be brought into conversation between us, which he so strictly fulfilled, that until I saw his plan in the due course of examination, I never had the slightest glimpse of a sketch, nor the slightest hint of any kind from him or from any common friend, which could lead me to infer that No. 64 was the design of Mr. Barry.

15. Mr. *Hume.*] I should wish to ask you whether you paid any attention to the necessity of artificial ventilation, or to the effect of sound, in the consideration of either of the plans?—None at all.

16. Had you read or seen the Report of the Committee of the House of Commons of last Session on sound and ventilation?—No; I had not.

17. Were

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17. Were you and the Commissioners at all aware of what Dr. Reid and Mr. Sylvester had suggested with regard to the shape of the Houses with respect to sound and ventilation?—Yes, I had; for I conversed once or twice with Dr. Reid upon the subject.

18. Are the rooms intended for the Houses of Parliament in any respect according to the suggestions of Dr. Reid, or according to the suggestions of any other individual who has wrtiten on the subject?—If the Honourable Member had read the Report of the Commissioners, he would have found that they particularly allude to the point of artificial ventilation and acoustics, and they say that from the want of competent knowledge on those subjects, they have not made either of them or the shape of the Houses a point for their consideration in determining the merit of any plan.

19. The Commissioners state that they have confined themselves to the consideration of the beauty and grandeur of the general design?—Not alone.

20. No, that was one of the points; will Mr. Tracy state in what the Commissioners consider the superior beauty and grandeur of No. 64, as compared with any of the others?—It is very difficult in a matter of taste to enter into descriptions; I would refer to the plans themselves, conceiving it impossible for any one to look at that of Mr. Barry, and not to feel what it is difficult to describe, the great superiority of it over every other that has been submitted to the Commissioners.

21. Perhaps you may be able to point out to us, who have not had the time, or perhaps the experience, a few of those distinguishing points in which you consider the superiority to consist?—In the elevation towards the River, which owes much of its grandeur and beauty to the solidity of its basement. In its unity of design, which is another great beauty, as well as in its general proportions, which it is difficult to define. It is a point of feeling and taste.

22. Did the Commissioners give that a preference from its superior beauty as a gothic building?—They did, but not solely on that ground.

23. Or merely from its regularity of form?—Not merely from its regularity of form, but its general beauty and excellence also as a design. I ought also to mention that I have now before me a plan of Mr. Barry's, in which several alterations from the original have been introduced, if any gentleman would take the trouble of examining it.

[*The same was handed in.*]

24. Is there not a tower of very great height, 178 feet, in that plan?—There is one, I believe, of nearly that height.

25. Are there towers of any thing like a similar height in any other plans?—I think there are, but it is difficult to remember the particulars of 97 plans, containing from 1,200 to 1,400 drawings.——[Mr. *Vivian.*] It is a very general feature of the plans that have come before us, that they have large towers or steeples.——Mr. *Tracy.*] I understood Mr. Hume to ask the question whether there was one of similar height or size.

26. Is the height and size of this tower one of the points that recommended the adoption of this plan to the Commissioners?—Certainly not.

27. Is a tower of that size and height not calculated rather to impair the light and air required by the adjacent parts of the building?—That must depend on circumstances, the way in which it is introduced; I know of no serious obstruction of light and air from the tower in question. Of course it causes a certain degree of shade, but I see no objection to the plan of Mr. Barry, from the height of the tower obstructing either light or air.——[Sir *Edward Cust.*] In all gothic buildings a tower or spire is generally considered a great element of beauty.

28. Then is it the opinion of the Commissioners that that tower will not cast any shade, so as to interfere with the light on the other parts of the building?—I should say, certainly it will not.

29. It will not?—Of course I cannot say the tower will not produce shade, but I repeat that I see no objection to the plan on that account.

30. Will you state how much higher the tower is over the King's entrance to the Lobby; then we may be able to judge?—I do not recollect; I cannot tell without reference to the drawing.

31. Are the Commissioners of opinion that a tower, 100 feet square, and of the

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the height of 178 feet, would not cast any shade, or impede the light of the building?—I cannot say that.——[Mr. *Vivian.*] It is not 100 feet square, it is about 80 feet.——[Mr. *Tracy.*] It would sound perfectly ridiculous to say no light and air was obstructed from one part of a building being elevated above another, but in my opinion the height of the tower is no objection to Mr. Barry's plan.

32. Mr. *Hume.*] You spoke of the style and beauty of the gothic; have the Commissioners considered the effect of air and weather on all exterior ornaments of that kind?—No, certainly not. That must depend greatly on the material; the selection of the stone, the quality of the stone. There are a great number of buildings, I am afraid, in this metropolis, which from the badness of the material are in a state of decay.

33. I will direct your attention chiefly to the gothic style, how far that is to be preferred for a public building for permanency in comparison with any other style, and I would wish to direct the attention of the Commissioners to the state of Henry the Seventh's Chapel, whether they are aware of the rapid decay of the ornaments from time to time, and whether, if this plan of Mr. Barry's, No. 64, were adopted, having similar ornaments, it would not be liable in a very short time to similar decay from what experience teaches us has taken place in the gothic building I have alluded to?—Unquestionably, if the new buildings of the Houses of Parliament had the same quantum of ornaments that Henry the Seventh's Chapel possesses, and if it were built with the same material, and no more care taken in placing the stone in the building, according to its bed in the quarry, the same result, I take it for granted, must ensue as in Henry the Seventh's Chapel.

34. That leads me to the next point of recommendation of this plan for its practicability; will the Commissioners state, then, if Bath stone or Portland stone, which I believe to be the stone used in Henry the Seventh's Chapel?——Mr. *Tracy.*] It is, I believe, all Bath; no Portland stone except in the plinth.

35. Then with a view to the practicability of carrying that into effect, seeing that Bath stone suffers so much by the weather, what stone or what materials do the Commissioners contemplate the new buildings to be made of?—I have no doubt but stone might be found that would not be subject to the injury from which that of Henry the Seventh's Chapel has suffered, but the subject certainly did not form a consideration with us in selecting the designs.

36. Did not durability form an element in the choice of the plan for building both Houses of Parliament?—My answer is, that I was one of a Committee of which the Honourable Gentleman who puts the question was a member, and I understood from him that the gothic style was the style of all others suitable to the situation. This objection he now makes, in my opinion, ought to have been taken previous to the appointment of the Commission; the Commissioners are surely not to be blamed because the question of durability formed no part of their consideration.

37. I am not blaming the Commissioners for their selection; I am only asking, as practicability is stated to be one of the points on which this was recommended, whether durability also did not, or if it did not form an element of choice with the Commissioners it will form, I presume, an element with the Committee who have to decide?—I should say that it ought to do so most unquestionably. The subject now entered into by the Honourable Member ought no doubt to be well considered before this or any other structure is commenced.——[Mr. *Liddell.*] As a question of durability, every Grecian building in London has undergone or requires similar repairs; and I beg to call your attention to St. Paul's and Whitehall Chapel, which latter building has been entirely revived; and I am of opinion that gothic architecture suffers less by the ravages of time than Grecian, because any reduction in the sharpness of the mouldings destroys the character and symmetry of a Grecian building, which is not the case in gothic, as most of our finest specimens in this country are in a ruinous state, but their beauty is unimpaired.——[Mr. *Tracy.*] If Mr Hume will give himself the trouble of examining well the design of Mr. Barry, he will perhaps agree with the Commissioners, that one great merit of the design is its simplicity. It is a design, in my opinion, simple and easy to be executed, and likely to stand the weather, but if bad materials are placed in the work it cannot be expected that it will be durable. The fault in Henry the Seventh's Chapel was, that a bad material was used, and not only was a bad material used, but sufficient care was not taken by the builders, as I have been informed, to place in the building the stone as it lay in the quarry. I know

perfectly

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perfectly well that without the greatest attention is paid to this point, at least in buildings of Bath or Portland stone, no work in Gothic architecture, or Grecian, or Elizabethan, or any other style can last.

38. The committee who prepared certain instructions for the architects, and who gave a preference to the Gothic and Elizabethan style, as it is called, may have been in error; the object of my question is, to ascertain the practicability as to its execution of that plan which has now been selected (No. 64); and deeming that durability is one of the elements which ought to guide in the decision of that subject, my question was directed to that purpose, whether, as I understand, Gothic architecture in this country suffers more than the Elizabethan or plainer structures, it ought to be preferred for these public buildings?—In answer to the question of the honourable Member, I do not pretend to deny that the plainer the building, the less ornamented it is, the less liable it is to be injured by the weather.——[Sir *Edward Cust.*] As Gothic architecture is the creation of the severer climates of Europe, it is a fair inference that it is not ill-calculated to endure the weather.

39. Its not being ill-calculated, I presume, must have reference to the materials to be used, agreeably to the answers that have been given. Then I would wish to ask, as regards the practicability, what material the Commissioners see in the power of the country to have to complete that building?—I have not, for one, turned my attention particularly to that subject; but I have no doubt that stone can be found that will stand the weather, if there is proper care and attention paid in the selection.

40. Mr. *Warburton.*] Are you aware that in the repairs of York Cathedral, the stone used for the external carving was first soaked in oil?—I am perfectly aware of it, that it is a very good plan. The stone work alluded to is beautiful, I never saw a finer arris produced in masonry than at York Minster. I do not allude to the new works, but to the old.

41. Mr. *Wynn.*] How does the stone used in the repair of Henry the Seventh's chapel appear to stand?—I have not examined it lately, but I believe it is in a bad state.——[Mr. *Vivian.*] There are portions that are decaying, especially the pinnacles of the south side; and the entire plinth is also in a bad state.

42. Mr. *Warburton.*] Are you aware of the French plan of trying whether stone is durable or not, by soaking it in a solution of Glaubers salt?—I am not.

43. Mr. *Hume.*] One of the recommendations of the plans is, the skill shown in the various ornaments of the building, and the accommodation afforded; are the Commissioners able to state in what this plan (No. 64) is superior to the others, seeing that the river face is at a different angle from the general mass of the buildings, and that the courts between the Houses and the river are all of irregular sizes and dimensions?—It is very evident the object of the architect has been to put the river front, that is, the east front, as nearly at right angles with Westminster Bridge as the embankment allowed. I know not any objection to that arrangement. Unquestionably, if the courts did not give sufficient light and air, there would be the objection that the honourable Member has made. But the architect has effected his object, in my opinion, without the inconvenience alluded to; I would then ask the honourable Member, what objection he finds to the courts being of irregular dimensions. They are not rectangular, it is true; the irregularity of the courts consists in one of their sides being parallel to Westminster Hall, the other to the east, or river front, which empowered the architect to make the apartments rectangular.

44. Mr. *Hume.*] My question was not directed to the general design, respecting which we have previously had answers; but it is to the superior arrangements and the superior accommodation which this plan is supposed to have over the other plans?—I have never given that as my evidence.

45. This is the paragraph in the Report: "We therefore confined ourselves to the consideration of the beauty and grandeur of the general design, to its practicability, to the skill shown in the various arrangements of the building and the accommodation afforded, to the attention paid to the instructions delivered, as well as to the equal distribution of light and air through every part of the structure." Now, I take it for granted, that the accommodation, the convenience, the arrangements of all the plans have been examined?—Clearly.

46. My question went simply to this, whether you could point out to the Committee the superior advantages which that arrangement had, and in what it consisted, that we might be able to judge, in looking at the others, between them?—

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them?—I wish the honourable Member would spare me the necessity of making comparisons between the several designs; if the honourable Member will point out to me the superiority of any other plan, I should be very happy to explain whence arises our difference of opinion.

47. I will explain what I mean, by showing that the space between the buildings on the river front and the buildings on which the two Houses are, seem to be interrupted by bulks of buildings, which prevent the circulation of air from north to south in any way to these buildings?—I do not exactly understand what the honourable Member means by the bulks of buildings, there must be communications, and they are simply communications from one part of the House to the other; I do not know how otherwise you would communicate at all, unless you could leap across the courts.

48. Mr. *Warburton.*] Is a line perpendicular to Westminster Bridge parallel to the axis of Westminster Hall?—No.

49. Do you consider it a matter of great importance to general architectural effect that the front of the new embankment should be perpendicular to the front of Westminster Bridge?—As to the general effect, it is better it should be at right angles with Westminster Bridge.

50. Sir *Edward Cust.*] Mr. Hume, perhaps, supposes that a rectangular court is better suited for ventilation than an irregular shaped one?—I do not apprehend the form of the court, independently of its area, would make any difference in the ventilation, except it was very disproportionate in its breadth.

51. Mr. *Hume.*] The wish I had was to ascertain how far the opinion I had formed, that the front towards the river should be in a parallel line with Westminster Hall, to which the great mass of building is parallel, and whether, as this plan is different, it was not a very considerable defect?——[Mr. *Vivian.*] I can see no defect in the general design on that score.

52. Then, am I to understand that there being a line along the river at right angles with the Bridge, although differing from the line of Westminster Hall, that that is an advantage instead of a disadvantage?—We have never said that there is any other advantage from it than the additional beauty it gives to the elevation towards the river.——[Mr. *Vivian.*] It is an advantage, if the effect of the river front is considered, with reference to Westminster Bridge; the line of front being at right angles with that building is better than if it ran in any other direction.

52.* Mr. *Warburton.*] You cannot combine in the same plan the two advantages?—It is hardly possible.

53. Mr. *Hume.*] My question alluded to the accommodation afforded, as stated in the Report, whether that does not rather lessen the accommodation than otherwise?—Not the least in the world.

54. Will Mr. Tracy state the advantages of entry to the two Houses which this plan does not show?—There is an alteration made in the arrangement in the entrance into the two Houses from the original plan.

55. What is the nature of the alteration?—The original plan is here, and therefore the honourable Member might refer to it. The grand stairs was at the back of the House; it was thought by the Commissioners objectionable that it should be in that situation, and that Members should be obliged to make the circuit of the House to get into it. By the alteration that the honourable Member will see in the amended plan, they will enter into the lobby fronting the House, not into that behind the Speaker's chair.

56. Then the alteration has been made since the original plan was submitted?—Clearly.

57. Does Mr. Tracy recollect whether the entrance, according to Mr. Hamilton's plan (No. 13), where the access to the House of Commons is from the north, and to the House of Lords from the south, in a direct line, whether that mode of entering both Houses is not easier and preferable to the other?—So much the contrary did we consider it; so much the contrary did both the architects consider it, that when the objection was suggested to Mr. Barry and Mr. Hamilton they both altered their plans; and I now hold in my hand an improved plan delivered to me but yesterday by Mr. Hamilton, in which he has made the Houses, instead of north and south, to stand east and west, which he told me he felt to be a considerable improvement.

58. Mr. *Hume.*] My question was put in allusion to the plans as they are?—Sir *Edward Cust.*] I think one objection will strike Mr. Hume, in reference to Mr. Hamilton's

Mr. Hamilton's plan, as it did originally stand, the throne and the Speaker's chair were back to back, consequently, the two bars were so distant from each other, that for the purpose of one House going up to the other they would be obliged to make a circuit equal to the whole length of the two Houses.——[Mr. *Tracy.*] Unless the Speaker went out the back way.

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59. Mr. *Warburton.*] In the conversation you held with Dr. Reid, were you able to form some general conception of the principle on which he proposed to construct rooms, so as to render them fit for the transmission of sound?—I cannot say that I was: it was a subject I thought others more competent to decide upon than myself. Architecturally I did consult him, and heard for the first time, to my astonishment, that projecting galleries were disadvantageous to sound, and should be particularly avoided, but that receding ones were admissible.

60. Supposing that principle of construction to be good, would there be any difficulty in modifying Mr. Barry's plan, so as to adapt it to Dr. Reid's principle of construction?—None at all. The object we had was to see that there was plenty of space, and to leave the question of the form of the Houses to those who understood better than ourselves the nature of acoustics.

61. Mr. *Colborne.*] Was the opinion of the Commissioners unanimous in favour of Mr. Barry's plan?—Unanimous; there was no hesitation whatever on the subject.

62. In reference to some question that was put to you about the different style of architecture, was it not the fact that there was one plan, and a very good plan, but not being of the Gothic style that was excluded from your consideration, you thinking that you were bound to adhere to that style from the direction of the Committee?—No, we were not limited to the Gothic; we had the choice of either, Gothic or Elizabethan, and we agreed amongst ourselves to give the utmost latitude to the term "Elizabethan," from the variety of opinions that existed as to its meaning; but notwithstanding the latitude we gave, some gentlemen sent in plans, which they called Elizabethan, that we, in our judgment, could not allow to come strictly under that denomination.

63. And that you excluded some, though you thought they had considerable merit on account of their deviation?—I cannot for one say they were excluded upon that ground.——[Sir *Edward Cust.*] I am sure there were none excluded solely upon that ground.

64. Mr. *Hughes.*] Believing that several of the questions of one of the honourable Members of the Committee arose from the fact that the plan No. 13 invaded the bed of the river much more considerably than that of No. 64, is it your opinion, and that of the other Commissioners, that that invasion of the bed of the river is desirable, or otherwise?—I hardly know how to answer the question. No plan that I am aware of encroaches beyond the boundary line marked in the plan delivered from the Office of Woods.

65. It appears on the face of Mr. Hamilton's plan that they extend out into the river up to the second abutment, or the second arch?—If it is so, I am not aware of it. I wish we had the plans before us. The honourable Member is not alluding to Mr. Barry's plan?

65.* No, the plan No. 13 (Mr. Hamilton's), it appearing on the face of it to invade the bed of the river more considerably than the others?—I should think not; there appears to be some misconception.

66. Mr. *Warburton.*] Whether you encroach upon the river more or less, must not the line of embankment be perpendicular to Westminster Bridge?—Certainly, one of the great beauties, in my opinion, of Mr. Barry's design is, that the embankment from the river forms in appearance the basement, and is an integral part of the elevation, and the nearer it is to a right angle to the bridge, provided it affects not the interior arrangements, the better. In no other instance has that, as far as I can remember, been attempted. Mr. Barry has produced by his treatment of this part of his composition a most happy effect.

67. Mr. *Hume.*] Then, to go on with the reports, is it the opinion of the Commissioners that this plan, No. 64, and the other three have superior facility for the distribution of light and air than any of the other plans?—I have not said they have.

68. It is with regard to the equal distribution of light and air?—Not superior to all other plans.

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69. But that is one of the elements of choice in this being preferred?—It must be a consideration.

70. It appears that this is one of the points you have laid down, and which you are to decide; my question is, whether these in that respect were superior?—No, not superior.

71. In what does the difference of opinion respecting the ground plans of these and the others consist?—If there is any object in it, I shall be extremely happy to enter into the question of preference, but it can only be done by comparison; would it not be better to refer to the plans themselves?

72. We had not the other plans before us, if we had I might have asked that question. It is alleged here that there is a difference of opinion?—It would be quite impossible it should be otherwise; we could not agree on all parts of a plan; I think our unanimity, considering all things, was wonderful.——[Sir *Edward Cust.*] There were some points which it was perfectly impossible for us to agree upon, for I do not believe the Committee themselves are agreed upon them; for instance, whether the libraries should be placed on one floor or another, whether the Committee rooms should be below stairs or above stairs, and many little points of that sort, upon which it was impossible for us to satisfy one another, inasmuch as we had no fixed principle to go upon.——[Mr. *Tracy.*] Consulting the Members who have occasionally visited me, I endeavoured to find out which would be the preferable plan, to have the libraries up stairs or on the same floor with the House; but I am just as much puzzled now as I was before I asked the question, which would be most likely to meet the approbation of the Members generally.

73. Mr. *Hume.*] A question was asked by an honourable Member whether any plans had been excluded, because they were not strictly within the Elizabethan style, as recommended by the Committee?—I believe I answered none solely on that ground.

74. Is there any definite description that could inform us what is strictly Elizabethan style as compared with the others?—None that I know of.——[Mr. *Liddell.*] The best example that I know of for fixing the date to what is usually termed the Elizabethan style, is perhaps shown in the screen of King's College, Cambridge, put up in Henry the Eighth's time, the Royal Arms being quartered with Anna Boleyn's, which is of a very rich Italian character. About this period it is evident that the Italian or Cinquecento style was introduced and grafted on the Gothic, which taste prevailed throughout the reigns of Elizabeth and James the First.——[Mr. *Tracy.*] My brother Commissioner is giving his own opinion; in the answer I gave, I took the opinions generally on that subject; my individual opinion of the Elizabethan style does not allow such latitude as is generally given.

75-6. Mr. *Hume.*] Does plan No. 13 come strictly within what is called the Elizabethan style?—We thought so, of course, or we should not have admitted it. ——[Mr. *Liddell.*] I should say Mr. Hamilton's plan partook more of James the First's style.——[Sir *Edward Cust.*] We thought Elizabethan an improper term to designate a style which is found all over Europe before and after our Elizabeth's reign; it is, in fact, a mixed style of architecture, the original Roman or (if you please) Grecian, grafted upon the Gothic.

77. In addition to the accommodation, were the Commissioners able to give a preference to the arrangements respecting Committee rooms in any of the plans submitted to them; that is, whether any of the plans show the Committee rooms near together or scattered, as in some of them they are along the fronts; and whether they are able to state any preference given on that account?—I do not know that there was any preference given to No. 64 on that account; I cannot say that there was.——[Sir *Edward Cust.*] But it is a peculiarity of No. 64, that the Committee rooms lay along one public corridor, and therefore are more closely together than in any one of the other plans that have been before us.——[Mr. *Tracy.*] I should remark, that my answer applied to the first plan of Mr. Barry's, on which we gave our judgment; it did not apply to the present plan now before the Committee, which has been altered considerably with respect to the Committee rooms from the original plan delivered to us.

78. Then there are offices required for the public business of the House of Commons; are the Commissioners able to state the preference or the difference between the plan selected and any of the other plans as a means of preferring this?—I think I have already stated that every plan went through a certain ordeal or examination

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examination to ascertain how far certain offices connected with the Houses were placed in judicious situations, easy of access, and, in short, that the general arrangement had been well attended to.——[Mr. *Liddell.*] The instructions were duly attended to.——[Mr. *Tracy.*] The fact is, that every plan was examined to see that it met the demands contained in the instructions given by the Office of Woods, and complied with the directions and specifications of the Committee. Mr. Hume would be surprised at the time and labour this took. It employed me nearly two months from morning to night to examine all the drawings and see that the specifications and directions delivered had been complied with.

79. I observe in Mr. Barry's plan, that St. Stephen's chapel and the cloisters are preserved, whilst in other plans they are not; is it the opinion of the Commissioners that that is an advantage to have them so kept?—Certainly; I should say the cloisters themselves are so perfectly beautiful that it were a sin to destroy them; at the same time I should never have thought myself justified in preferring any plan merely on that account. I did last year endeavour to call the attention of the Committee to the subject, and to inspire them, if I could, with similar sentiments to my own, but unfortunately failing in my attempt to induce the Committee to pass a resolution in favour of their being preserved, I felt myself bound, in justice to the architects, not to consider their preservation in any plan as a reason for preferring it. ——[Sir *Edward Cust.*] Mr. Hume's question only spoke of St. Stephen's chapel and cloisters; I am desirous of reminding the Committee that the crypt under St. Stephen's chapel is equally worthy of consideration, whatever may be the opinion with regard to the durability of the chapel itself; the crypt under it is nearly as sound as it was the first day it was built, and is a beautiful example of the Gothic architecture of the period: as the Committee had not determined whether they were to be retained or destroyed, we made that no difference in the selections we made, and the plan No. 13 actually does clear away the whole site.

80. Have the Commissioners considered to what use, connected with the Houses of Parliament, the cloisters can be put?—We have; in Mr. Barry's plan they are used as passages and offices.——[Mr. *Vivian.*] The cloister court is useful for the admission of light and air into parts of the building.

81. The Commissioners state that it is obvious that, previous to the plan pointed out (I presume that means No. 64) being executed, it requires to be revised and corrected?—Yes, it does.

82. In what respect do the Commissioners consider that ought to be done?—I would refer to the answers made before upon that point. There are many alterations in Mr. Barry's plan from the original.

83. In what would you recommend the alterations to be made; you say here in your report, it is obvious that, previous to its being executed, it requires to be revised and corrected, but we feel confident that had we thought it expedient to have communicated with the architect, as we were empowered to do by the Commission, and pointed out such parts of the arrangement as appeared to us objectionable, he would have felt no difficulty whatever in rendering the plan not only free from any solid objection, but one the execution of which will throw lustre on the era in which it is built.

84. Then would you just state what is the principal point of alteration?—The principal alterations in Mr. Barry's plan is the approach to the House of Commons, which was by a staircase to the north; it is now on a line with the Speaker's Court. The situation of the House itself, which is removed farther from the central lobby, affords the opportunity of giving more light and air to the basement.

85. Do you allude to the entrance to both Houses being from the north, or only the House of Commons?—No, I am alluding to the House of Commons. The alteration is, that instead of the approach being by a staircase to the north, and entering by a lobby at the back of the Speaker's chair, the entrance is now directly in front of the House, by the lobby at the Bar end of the House, and the approach to it is by a staircase to the east of that which was the Speaker's Court.

86. Which do you mean by the front?—The front of the House of Commons; the bar end of the House of Commons.

87. Did we understand you to say before, you had had no communication with the architect until after your report was made?—I did; we did not see the architect till after the report was made.

88. Then on what did you found the opinion that the plan could be rendered free from any solid objection, when you had no communication with the architect?

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—Possibly we may be accused of presumption in saying so, but we thought we saw the way to make the alterations ourselves without consulting him.

89. Have you considered any alterations that might be made in any of the other four plans that might improve them?—I have, and the same opportunity was given to each architect to avail himself of the suggestions of the Commissioners; we were directed only to see the architect of 64, but we thought that as the selected plans were all to be laid before Committees of the two Houses, who were to confirm or report our classifications, that it would be hard on the other three architects who gained premiums, and that we should not be doing equal justice to them if we did not afford them the same opportunity of altering their designs. The Committee will observe at the same time, that each architect was told not to adopt any suggestions of ours, unless convinced that the alteration proposed would be an improvement.

90. Have the architects of 42 and 14, as well as those of 13 and 64, made any altrations?—They have.

91. On your, or on their own suggestions?—On our suggestions, as they chose to adopt them, but we left it entirely to their own judgment and discretion. I should remark, that the alterations we suggested were not such as required the recasting of the whole design.

92. Sir *Harry Verney*.] Has this plan been referred to any of the officers of the House of Commons?—Certainly not, because all the officers of the House of Commons were examined before the Committee, and it was on their evidence that the accommodation which the architects were to furnish was decided upon.

93. Of course the officers in their examination before the Committee would be very fit judges, with regard to the extent necessary for each office, though they could not so well state the necessary proximity?—They did, they were asked that question.

94. Sir *Robert Peel*.] Was not your selection of the four plans founded on a combined consideration of the beauty of the exterior, and of the convenience of the accommodation?—Certainly.

95. And your selection of Mr. Barry's, in preference to the three others, founded on the same consideration?—Yes, it was.

96. Disregarding for the moment the beauty of the exterior, was there any plan of the whole offered to you that was equal to Mr. Barry's, in point of accommodation and convenience?—I should say that there were.

97. That there were some equal?—Yes, quite. I have no hesitation in saying it is my opinion that there were.

98. Then would it be possible now to select the most convenient of the plans, and apply the interior to Mr. Barry's elevation?—Impossible. Independent of which, Mr. Barry can make all the alterations requisite, and render his plan more perfect, I should say, than any other; I have no doubt that his plan may be much improved. In my opinion the situation of the House of Lords should be removed more to the south, to get a greater space between the general central lobby and that of the House of Lords, to afford additional light and air to the basement, as well as alteration. There is no objection on the part of Mr. Barry.

99. You consider still there are material improvements that may be made in Mr. Barry's plan as to the interior, in addition to that which you have suggested?—No doubt many may be made, and without the least injury to the external beauty of the design.

100. Apart from the consideration of the exterior beauty of the edifice, was there any plan remarkable for the convenience of its interior arrangement?—I should not say that there was any one very superior to that of Mr. Barry's in its arrangement.

101. Looking at only the interior arrangement?—Yes.

102. But you think it very probable that even among the plans that were not selected for a reward, there may be one or two at least equal in point of interior convenience to the four that were selected?—Certainly.——[Mr. *Liddell*.] When you said you knew of some, I know of but one.——[Sir *Edward Cust*.] I am not aware that there is any plan out of those that were not selected that was agreed upon amongst ourselves as a better plan than what was selected. In the natural difference of opinion that would exist amongst us about the plans, we may individually have preferred another, but I am not aware there is any plan among those rejected that met with the unanimous concurrence of the Commissioners as to its superiority. I mention that strictly in reference to Sir Robert Peel's question.——

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[Mr. *Tracy.*] We never considered the interior alone in passing our judgment, but the general design; and the question never arose between us, whether any plan should have the preference merely because it had a good interior, it must have been one of very extraordinary merit that would have induced us to have done so.

103. You think that Mr. Barry's plan is capable of being made with the improvements you have suggested, and the additional improvements that it may still receive; you think Mr. Barry's plan is capable of being made at least as good as to interior arrangements exclusively, as any plan which has been submitted to you?—Certainly; I have no hesitation in saying so.

104. And that in that case, after the improvements so made, we then shall have the plan which will combine as much of interior accommodation as any other, and more of external beauty?—Certainly.

105. Mr. *Hume.*] Are all the entrances on one floor?—Yes.

106. Now with regard to the passages, has attention been paid to the passages being at the side where you could have light?—Yes. There is no corridor or office that is not well lighted. I paid particular attention to the subject of light, anticipating that I should find greater failures in that respect than any other. To the best of my recollection there was no part of Mr. Barry's plan, save one, that was not well lighted, and the objection made on that ground has been since partly, and will be wholly removed.

107. *Chairman.*] Do all the Commissioners agree in the question that was put, that suppose Mr. Barry's plan were adopted it might be made equal in its interior arrangements to any other plan which they had before them; Mr. Tracy has said that that is his opinion, and it is important that we should know whether the other gentlemen agreed with him in that opinion.——[Sir *Edward Cust.*] I should be glad to say in answer to that question, that I perfectly coincide in every word that I have heard fall from Mr. Tracy, and had I not done so, I would have taken the liberty of putting forward my opinion as I have ventured to do upon those points in which I thought there was any thing omitted to justify my interference.——[Mr. *Liddell.*] I entirely agree with every thing that has passed.——[Mr. *Vivian.*] My opinion is also decided on that point.——[Mr. *Tracy.*] With regard to perfection in a plan, I wish to be understood, that in my opinion, there is no such thing as perfection in architecture; Mr. Barry may go on improving this plan, and I do trust that if it is adopted it will be improved from time to time in parts not actually under hand, until the building is completed.

108. Sir *Robert Peel.*] Do you think there would be any inconvenience in having a good model of it?—I think it would be a very good plan to have a model, but at the same time I must observe that nothing is more deceiving than a model to an inexperienced eye; it is as much so as architectural drawings, which, whether perspective or geometrical, require some knowledge of drawing and attention to the ground plan to be properly appreciated, objects being frequently introduced in geometrical elevations that never can be seen when the structure is completed; this frequently happens, and more particularly in situations like that for the proposed new buildings at Westminster, where the views are all confined, and many parts of the structure can never be viewed at a proper distance. There were many drawings submitted to us of this description.——[Mr. *Liddell.*] At the same time a model shows the projections, and shows a great deal of what it is very desirable to see in that form done to a precise scale, if it be not too small. The scale ought not to be less than half an inch.

109. Mr. *Chancellor of the Exchequer.*]—Have the Commissioners formed any judgment with respect to the expense of Mr. Barry's plan?—In consequence of the reports spread abroad respecting Mr. Barry's plan, that it would cost from 1,500,000*l.* to 2,000,000*l.*; and more, I have taken considerable trouble by examining the plans to discover the accuracy of such statement; and I confess myself, and I have stated the same I believe to my brother Commissioners, that I see no reason for believing that the plan will cost more than 500,000*l.* Numbers of the plans that have been submitted to us, although in appearance they are not so imposing—not so rich—would be infinitely more expensive. One main feature in Mr. Barry's plan is, that there are no projections serving to increase the girth of the building. Another main feature of this plan is, that, except the frontages themselves, there is no extraordinary expense whatever to be incurred; no external decorations being required for any of the interior courts. Considering the magnitude of the building, it is impossible to conceive a design equally magnificent, and at the same time less expensive than that proposed by Mr. Barry.

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The part which will be most expensive is the great tower; it is not however absolutely necessary that it should be introduced; yet it forms so magnificent a feature in the design that the reasons ought to be strong for rejecting it. Perhaps the architect will be able to make some alteration in it which will lessen its expense. But it is an extremely beautiful feature of the composition, and I should regret that its effect should be injured by any mistaken notion of economy. Mr. Barry did mention that his design would cost more than he finds, on consideration, will be the case; and I believe I am authorized, from what has fallen from him, to say that it will not cost more than the sum I have mentioned.

110. Does that include the tower?—That includes the tower.——[Mr. *Liddell.* At the same time that must be treated liberally, because it is a rough calculation of Mr. Barry's.

111. Sir *James Graham.*] If it be assumed that the internal size and general internal arrangement of Mr. Barry's plan is adopted, can you form in your own judgments any approach to an estimate of the difference between the expense of Mr. Barry's Gothic structure, as proposed by him, and a plain structure of hewn stone?—This question involves so many preliminary inquiries before it can be answered, and so much thought, that I feel it to be out of my power to reply to it. If the honourable Member will have the goodness to examine the plan in his hand, he will observe there are two ways pointed out of executing one compartment of the work. It is an elevation made from the first plan of Mr. Barry's, from curiosity to examine the detail, and try the effect of different modes of executing the work. The elevation is made with the plain chamfered jamb, and would cost about one-third as much as it would if executed with the other jamb seen on the same ground plan, which is of a much richer character; and unless, therefore, it is previously determined what is to be the detail, and in what way the work is to be executed, both the plain structure and the ornamented one, I can form no idea of the difference.

112. But having formed a general estimate on the plan as it now stands, proposed by Mr. Barry, that 500,000*l.* will cover the execution of it, my question is pointed to a comparison between such expenditure on the plan as now proposed and a structure of equal size and equal accommodation on the same ground plan, but without any expensive ornament?—As I said before, it is out of my power to answer the question; my idea of the expense of the structure was not formed from any comparison of what it would cost in a different style of architecture.

113. Sir *James Graham.*] The question is asked with the view of showing how much for ornament and how much for use?—I am sure there is not an apparent ornament in Mr. Barry's front towards the river that can be dispensed with; but the expense depends on the choice of the moulding, by an injudicious selection of which the cost of any of the fronts may be doubled.

114. Mr. *Chancellor of the Exchequer.*] Can the Committee consider the 500,000*l.* that you have named as more than an approximation, and a very rough one?—I should say most decidedly; from the conversation I have had since with Mr. Barry on the subject, I should say that it is very close upon it indeed.

115. Supposing that it was considered expedient, in the event of this plan or any other plan being preferred, to proceed to a closer estimate, in order to decide upon the expediency of adopting the plan, can the Commissioner suggest to us the best mode in which we could make that inquiry so as to approach as near as may be to the actual expense of the building?—Before Mr. Barry can deliver any thing like a correct estimate, he must receive instructions as to what parts of the building it is considered necessary to introduce extra decoration; all parts will require some decoration, but not all ought to be highly decorated.

116. But supposing that step were taken, do you conceive that we could procure for Parliament an approach to a correct estimate without specifications, and without working drawings being made out?—No; the architect should have before him, in order to do it faithfully and correctly, the working drawings.——[Sir *Edward Cust.*] To show how difficult it is to get to any thing like a just approximation of the expense of any building, I know an instance where a difference existed between twelve several contracts for the same work that varied from 18,000*l.* to 24,000*l.*

117. What time do you conceive might be employed in getting the specifications and working drawings made out for a building of this magnitude, so as to present to Parliament the actual estimate?—It would take a very considerable time to do it as it ought to be done, not in the way estimates are generally made, but to give

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an accurate and faithful estimate of the expense must take a very considerable time. This question was considered by the Committee, and it was proposed that all the architects should send in estimates with their designs; I remember I objected to a resolution to that effect, on the ground that it would be a bar to all competition, as many of the architects could not afford to go to such expense, and others could not afford time too limited for taking down the design. It is one thing to give an estimate, and another thing to give an estimate that can be relied upon.

118. But do you think that the working drawings and the specifications, and the actual estimate could be completed within a period of several months?—I should wish to have a little time to consider the subject. It will be a work of considerable labour, and must depend upon the number of artists employed.

119. Sir *Robert Peel.*] Do not you think before we begin a public structure, which ought to remain as a monument of the national taste to a very remote posterity, that it would be important that some public department of the Government should institute very minute inquiries as to the comparative advantage of taking particular kinds of stone, and as to the effect of a London atmosphere upon those classes of stone respectively, for instance, that the comparative price of getting the Caen stone or the Bath stone, or the Portland stone, or stone from Normandy should be ascertained?——[Mr. *Liddell.*] And I may mention a stone employed in London Bridge, which is from the county of Durham; I think it might be very desirable for future buildings in London.——[Mr. *Vivian.*] The Ketton stone, in Northamptonshire, is a good material, and in Shropshire, the Grimshill is still better.

120. Sir *Robert Peel.*] Is not Canterbury Cathedral built of Caen stone?—Yes, I believe it is.

121. Have not the recent repairs been made in Caen stone?—Yes, I believe so. ——[Sir *Edward Cust*] I do not believe that there is any reason to suppose that the Caen stone is superior to stone that is found in many parts of this kingdom. It may possibly owe its former estimation in England to the ignorance of our own resources in this material.

122. Mr. *Hume.*] Is it not better proof against the changes of weather in this country?—I should beg to observe, on the subject of stone, that it often varies in quality in a few yards in the same quarry; a stone has often got a bad reputation that is extremely good from being taken from a bad stratum.

123. Sir *Robert Peel.*] But supposing professional men were instructed to make a minute inquiry into the state of the most exposed parts of St. Paul's Cathedral; into the state of the towers of Westminster Abbey; into the state of Henry the Seventh's chapel; were to ascertain the quarries from which the stones used in those buildings respectively were taken, and to make a Report to the Treasury upon the effect which the smoke and air of London had upon those several structures, do not you think some very valuable conclusions might be drawn with respect to the probable advantage of selecting any particular stone for this intended structure, and for future buildings connected with public objects?—I think a good deal might be done in that way, but at the same time I must observe, in reference to my former answer, that much depends not only on the quarry, but the stratum whence the stone is selected. It does not follow that because Henry the Seventh's chapel is built of Bath stone, and the work is perishing, that Bath stone is to be condemned as bad.

124. Would it not be of importance that the fact should be ascertained and distinctly stated, and that the department which is to have the superintendence of this work should see that the utmost care was taken, after determining the quarry, in selecting the stone?—Certainly.——[Sir *Edward Cust.*] Perhaps I might be allowed to add, that Blackfriars Bridge and St. Paul's Cathedral are both built of Portland stone, and although Blackfriars Bridge is considerably less ancient than St. Paul's, yet, in consequence of its having been built of extremely bad material, it is now in a very decayed state.——[Mr. *Vivian.*] It is ascertained that Portland stone does not resists the action of water.

125. Assuming Mr. Barry's plan selected, would it not be important also to consider which class of stone was the best suited for that particular style of building?—Yes, to ascertain its durability alone is not sufficient for the object required.

126. Will not the chief point of view of this new building to any person, excepting one who views it from the surface of the water in a boat, be from Westminster Bridge?—Surely.

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127. Will not he therefore necessarily view it at a considerable elevation beyond the base of the building?—Yes, from Westminster Bridge.

128. Is it not therefore your opinion that a tower will be of essential importance in point of architectural taste, as breaking not only the sky outline, but as giving elevation to a building which must be seen itself from a considerable elevation?—Certainly.—— [Mr. *Liddell.*] The tower is placed at a right angle of the body of the building, consequently it might be left till the very last thing to be executed, and when you saw the mass of the building, it might then become a question, "Do we want the tower?" it really is so placed that it might be left till the very last thing. ——[Mr. *Tracy.*] I should be very sorry not to introduce the tower, and till economy compels us to abandon it, I hope that will form part of the design.—— [Mr. *Liddell.*] I mean, as it does not occupy a central point of the building, it might be left till afterwards.

129. Sir *Robert Peel.*] Has it ever occurred to the Commissioners whether it would be desirable to make some arrangement, with respect to the execution of the construction of this building?—Yes.

130. Would it not be much better to appoint some persons permanently to superintend it, rather than to leave it merely in any department of Government?—I should say so. The Commissioners have given this as their opinion in their report. ——[Sir *Edward Cust.*] I believe the expense of public buildings has been of late years very much increased, in consequence of the inefficient control of the Executive over them.

Veneris, 22° die Aprilis, 1836.

MEMBERS PRESENT.

Sir John Hobhouse.	Mr. Bernal.
Mr. Chancellor of Exchequer.	Sir Robert Peel.
Sir James Graham.	Mr. Hume.
Sir Harry Verney.	Mr. Ridley Colborne.
Sir Charles Burrell.	Sir Robert Inglis.
Mr. Williams Wynn.	Mr. Hanbury Tracy.
Mr. Warburton.	Sir George Clerk.
Mr. Hughes Hughes.	Lord Viscount Howick.

SIR JOHN HOBHOUSE, BART., IN THE CHAIR.

Charles Barry, Esquire, called in; and Examined.

C. Barry, Esq.

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131. *Chairman.*] THE Committee wish to know what alterations have been made since the plans were sent in?—The principal alterations are a removal of the entire building from Westminster Bridge to the extent of 150 feet, instead of being, as in the original design, 60 feet; an extension of the river front, which has enabled me to enlarge the whole of the internal courts for the purposes of increased light and ventilation; a removal of the two Houses to a greater distance from each other, and certain modifications in the arrangement of the offices, residences, &c. The plan, in all other respects, remains much the same, except in being more square and upon a parallel with Westminster Hall, in consequence of a late alteration in the line of embankment towards the river. The composition and character of the design remains nearly the same.

132. Has there been any new distribution of the rooms?—Not any that are material, except as regards four Committee rooms adjoining the Speaker's house, which might have been inconvenient, as intercepting the access of the Speaker to and from the House. These Committee rooms are now placed in the centre of the river front.

133. Would it make any great difference if the library, which you have now destined to be at such an immense distance from the House of Lords, and from which the Lord Chancellor when he is sitting is every instant wanting books, were removed closer?—The distance is not very great, it is connected by a corridor adjoining the gallery at the south-end of the House, which corridor is about 80 feet in length and in a direct line; the House of Lords is nearer the library than it was in the original design.

134. The object of the question was whether you could not make a sufficient arrangement for the rooms for the bishops, and place the Lords' library nearer the House?—It would be injurious to the plan to do so. The approach to the library is commodious by means of the corridor alluded to.

135. Direct, without any turning?—Yes; on coming out of the corridor of the House the library is within a distance of 80 feet.

136. Will the House of Lords have so beautifully a shaped library as they have now?—I think the proposed library will be in better proportion.

137. You have altered the small tower, the last was infinitely more beautiful and more in character, was it not?—It is still in the same character in its detail as the rest of the building.

138. Was your object in altering the smaller tower for the sake of reducing the expense, or from an idea of your own that it would improve the building?—Not for the purpose of economy, but to make it accord with the modified plan as well as to improve the external character of the design. In the original design the tower contained the Speaker's dining-room, which in the amended plan has been removed, so that so large a tower was unnecessary.

139. Then, in your judgment, it improves the elevation of the building?—Yes, it is a great improvement.

140. You have stated that by the taking down the buildings in Abingdon-street you obtain ground to the extent of about 100 feet; what increased extension of building do you contemplate?—The ground thus obtained has a frontage to the river of about 200 feet, about one-half of which, or 100 feet, I appropriate to an elongation of the river front. It was optional with architects to take or exclude from the site the property between Abingdon-street and the river.

141. Then the length of the building is considerably increased?—Yes, the length of the entire building is increased about 50 feet, and removed nearly 90 feet farther from the bridge.

142. Is it increased in size?—In length only.

143. Is the tower in a different situation in the new plan?—No.

144. Can you, unless you take down all the houses in Abingdon-street which you have the power to take down, open any view to the tower and the part between the tower and the river?—I propose for this purpose to take down the whole of the buildings on the optional ground.

145. It was understood this ground would be disposable?—Yes; in fact there were very few of the competing architects who did not take the advantage of it; they considered it to be a part of the given site.

146. Then the front of the new Houses of Parliament, according to the improved design, will be 50 feet longer than according to the original plan?—Yes.

147. Have the alterations, as contained in these plans, the distinct approbation of the Commissioners?—Entirely so.

148. Is there any alteration in the office appropriated to the Lord Great Chamberlain?—None, as to accommodation, but as to position only.

149. Does the sum total cover the whole expense?—Yes, with the exception of the cost of the site, which I considered to be already provided.

150. By the original design, the terrace towards the river was to be 26 feet wide?—Yes.

151. And by the altered plan that is extended to 30?—Yes.

152. Is that the utmost limit to which you could carry it?—Yes, I think so, when considered with reference to the character of the river front.

153. It is as wide as you could desire it, if you had the power to increase it?—Yes.

154. But you consider the additional four feet an improvement?—Yes, I think it is, it was made in accordance with a wish expressed by one or two Members of the Committee.

155. Is that increased width obtained by taking more from the river than was taken before?—No, but by setting the building back.

156. Where were the four feet taken from?—It is obtained by setting back the river front, which has not occasioned any loss of accommodation, as the entire building is increased in length.

157. So that the loss in breadth is made up in the addition to the length?—Yes.

158. How long do you think that it would take to complete the building?—I imagine about six years for the entire completion; it will be possible, however, to

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to complete the Houses and Committee rooms long before that period, perhaps in about two years.

159. But in the mean time the temporary buildings need not come down?—No, the present Houses need not be taken down until the new Houses are completed.

160. Does the alteration leave the distance between the end of the House of Commons and Henry the Seventh's chapel the same or more than it is now?—The question I understand alludes to the width of the entrance to Old Palace Yard, where there is a very considerable alteration, which occasions an increase of width from 60 to 100 feet.

161. How has that been done?—By shortening the Law Court front, as will be perceived in this plan. The view of the tower will be very much improved by the increase of the opening alluded to.

162. Where is the entrance for the Members of the new House of Commons?—In New Palace Yard.

[*The Witness pointed it out on the plan.*]

163. Would it not be an improvement to take away the proposed buildings at the south end of Westminster Hall, and make an entrance through the cloister?—It would be attended with an entire demolition of the cloister, and not have so good an effect as the approach which is proposed.

164. As to the expense, what is the increase in respect to the difference of the plan as now corrected, and the plan as originally proposed; is it in the additional purchase of the land in and near Abingdon-street, which was not included in the original plan?—Yes.

165. What would be the additional expense of that purchase?—About 60,000 *l.*

166. What would be the additional expense resulting from the increased length of the whole building?—It is rather difficult to answer that question, because upon the original plan no detailed estimate was made. The sum first mentioned was only a speculative estimate, but as compared with that it would be about 60,000 *l.*

167. Can you tell what will be the diminution of expense resulting from the retrenchment of the decorations?—About 50,000 *l.*, occasioned by the omission of niches, statues, pannelling of parapets, &c. &c.

168. Therefore the addition to the total expense made by all the alterations is about 60,000 *l.* or 70,000 *l.*?—Yes, including the fee simple of the enlarged site.

169. The purchase of the ground is in addition, and then you deduct the expense of the decorations, and the balance is about 60,000 *l.* or 70,000 *l.*?—Yes.

170. What is the amount of your estimate, including every thing?—Seven hundred and twenty-four thousand nine hundred and eighty-four pounds.

171. Does that include the purchase of the ground?—It is exclusive of the site.

172. Then this is exclusive of the purchase of the ground in Abingdon-street and the embankments?—Yes; it is a maximum estimate as applying to the building only.

173. Does that estimate contain any amount for contingent expenses?—Yes.

174. At what rate?—At the rate of 14 *l.* per cent.

175. Does that include the supervision by the architect?—Yes.

176. Does it include the river embankments?—It is exclusive of the river embankments, for which a grant has been already voted by the House.

177. Does that estimate include the interior fittings at all?—It does.

178. By interior fittings what do you exactly understand?—I mean closets, presses, fixtures of the domestic offices in the several residences, and things of that description.

179. Nothing that approaches to furniture and internal decoration?—No; not furniture.

180. Fixtures?—Yes.

181. Do you include grates?—No.

182. But you do chimney-pieces?—Yes.

183. What is your estimate of the embankments?—Forty thousand pounds.

184. What provision is made for ventilation for these Houses, is it included in this plan?—The only provision for ventilation consists of the necessary flues in the several walls, but the apparatus has not been estimated.

185. Has your attention been turned to Mr. Nott's American stoves?—Yes.

186. There are some in the New Pantheon?—Yes, there are.

187. Do you think they are safe for buildings?—No, I do not think they are so safe as many other inventions for warming.

188. Do you not think they are less dangerous than others?—No, I should say with

with respect to them, that there was an apprehension of danger arising from the iron becoming red hot.

188.* But an improvement having been made by lining them with fire-brick or fire-stone, do you, with this improvement, consider they would be liable to your objection?—I was not aware of this improvement, which certainly lessens the objection materially.

189. What calculation of prices have you adopted in forming this estimate?—The present market prices.

190. Do you consider those prices to be generally high?—Yes, I consider them to be high.

191. The price of iron has risen very recently to some extent, has it not?—Yes, the price of iron is now eight pounds or guineas in the pig.

192. Lead is also rising, is it not?—Yes.

193. Is the base intended to be built with granite?—No, certainly not.

194. That is done in all churches, is it not?—No, not in every one.

195. Is it intended to build the walls upon concrete?—Yes.

196. And to lay the concrete upon the bed of gravel?—Yes.

197. Has the estimate been formed upon the highest priced stone that could be got?—Yes, upon the highest priced stone that is likely to be used.

198. In order to understand the alterations, would it not be desirable to have a transparent plan to lay over the original?—I have not prepared any such plan, but I could explain the alterations as well without it.

199. Do the interior alterations involve any material alterations in the exterior?—No, not any of consequence, except the extension of the river and west fronts about 50 feet.

200. In what manner would that affect the river front?—In the manner shown by this elevation.

[*The Witness pointed out the same.*]

201. What is the difference in cost from the alterations made?—I should say about 60,000*l.*, that is by removing the niches, the pannelling of parapets, &c.

202. Do you think the present plan, including the recent interior alterations, can be effected for 60,000 *l.* less than the original?—No; because the plan has been extended. The extension of the plan makes up for the saving in the decorations.

203. The two additions together, balanced against the reduction, leave an increase of 60,000*l.* or 70,000*l.*?—Yes; if the fee simple of the ground between Abingdon-street and the river is included.

204. In consequence of the contraction of the Law Courts front, is it not necessary to make up for that; was it no part of the plan of the Houses?—It was wholly unconnected with the plan of the Houses and their accommodation.

205. Will there be a greater space than in the original plan, between the south front of the proposed building and the remaining houses in Abingdon-street?—Yes, the increase in the space is 40 feet; it would, according to the original plan, have been 30, and it is now 70 feet.

206. Something was said about the buildings in Abingdon-street, and the expediency of getting rid of those buildings to give a full view of the grand tower. If you had your choice, would not you prefer getting rid of the buildings in Old Palace Yard, in order to extend the perspective view of the tower, and also to extend the view with regard to Westminster Abbey?—Yes, I should say that the buildings on the south side of Old Palace Yard would be better removed.

207. You say you have taken your estimate upon the highest price of materials?—Yes, at the present time.

208. And upon such highest price you have added 14 per cent.?—Yes, to cover all contingent expenses.

209. Have you not reason to expect that the prices will rather remain stationary, or will fall, and that, therefore, there is no necessity for charging 14 per cent. as a possible increase upon such estimate?—I cannot give an opinion. The allowance of 14 per cent. is not entirely for any possible increase that may take place in the value of labour and materials, but also to cover all contingent expenses.

210. So far as such charge of 14 per cent. is intended to include the possible increase of prices, do you consider the state of the market, at the present time, to require such a per centage?—Yes; I should say, with respect to iron and lead, there is a probability of an increase.

Veneris, 29° die Aprilis, 1836.

MEMBERS PRESENT.

Sir John Hobhouse, Bart.	Sir Harry Verney.
Mr. Chancellor of the Exchequer.	Mr. Ridley Colborne.
Sir Robert Peel.	Sir Robert Inglis.
Lord Viscount Howick.	Mr. Williams Wynn.
Lord John Russell.	Mr. Tracy.
Sir James Graham.	Mr. Warburton.
Sir Richard Vyvyan.	Sir George Clerk.
Mr. Hume.	Mr. Hughes Hughes.

SIR JOHN HOBHOUSE, BART. IN THE CHAIR.

Charles Barry, Esquire, called in; and further Examined.

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211. Mr. *Hume.*]—YOU have been making an estimate for this building; have you done it yourself, or employed competent persons to do so?—I have done it myself, and employed competent persons to assist me.

212. Is it usual for architects themselves to make the estimate, or do they not employ other persons to do so?—They generally employ other persons.

213. Will you state to the Committee in what manner you made this estimate, and who checked it?—Mr. Chawner and Mr. Hunt.

214. What are they?—Mr. Chawner is an officer of the Woods and Forests, and Mr. Hunt is a surveyor employed very much by architects and builders in making estimates.

215. Will you state to the Committee the principle on which the estimate has been made, and the mode of measuring the different parts of the building?—The estimate has been made upon the principle of the value per foot cubic.

216. *Mr. Warburton.*]—Just explain to the Committee that principle?—By measuring accurately the cubical contents of the building, and pricing such calculations according to a given standard.

217. Mr. *Hume.*] Have the calculations been made from the plans which are upon the table?—They have.

218. The amended plans?—Yes.

219. Is the quantity calculated by the cubic foot?—Yes, upon the foot cubic.

220. Can you state to the Committee by your books what is the quantity of stone?—Yes, upon calculation; but I have not carried out the quantity of stone, though I could do it very shortly.

221. If you have not carried out the quantity, then at what rate have you estimated the foot cubic of stone?—At 4*s.* per foot cubic.

222. What is the amount of stone?—About 506,647 feet.

223. Mr. *Warburton.*] State the quantity of rods of brickwork, and the amount per rod?—About 7,950 rods, at 11*l.* per rod.

224. Mr. *Hughes Hughes.*] Will you state to the Committee when Mr. Chawner checked this estimate, whether he had before him the quantities?—Yes, he had.

225. Then having laid them before him, can you not easily supply them to the Committee?—Yes.

226. Have you got that paper which you gave in before with the grand total of 724,984*l.*?—Yes, I have.

227. Sir *Robert Peel.*] What do these sums under the head of masonry include?—It includes the stone, as well as labour.

228. Can you separate the masonry from the brickwork?—Yes; I should have no difficulty in doing that.

229. Sir *Robert Inglis.*] Does that calculation include the costs of the ground in Abingdon-street?—No, it does not.

230. Sir *Robert Peel.*] Does it include the labour?—Yes.

231. Mr. *Hume.*] Is this the estimate that you delivered in of the buildings?—Yes.

232. As now amended?—Yes.

233. Sir

233. Sir *Robert Inglis.*] Is the estimate which you now produce to the Committee the one you produced to the Joint Committee on the 22d of April?—Yes, it is.

[*The Estimate was handed in, and is as follows:*]

ITEMS.	CONCRETE.	FOUNDATIONS.	Superstructure, exclusive of Exterior and Interior Masonry of Carcase.	MASONRY.	TOTAL.	Fourteen per Cent. possible Increase of Value in Materials and Labour, and all Incidental Expenses.	GRAND TOTAL.
	£.	£.	£.	£.	£.	£.	£.
A. River front, and return ends	4,432	8,104	163,906	52,678	229,120✓	32,077✓	261,197✓
B. Record Tower (lower part)	867	838	21,585	13,689	36,979✓	5,177✓	42,156✓
Ditto - (upper part)	- -	- -	39,936	24,598	64,534✓	9,035✓	73,569✓
C. Clock Tower (lower part) -	243	165	4,627	3,616	8,651✓	1,211✓	9,862✓
Ditto (upper part) -	- -	- -	4,200	5,306	9,506✓	1,331✓	10,837✓
D. Old Palace-yard Front -	826	1,471	25,981	8,163	36,441✓	5,102✓	41,543✓
E. New Palace yard Front -	942	1,763	30,407	6,296	39,408✓	5,517✓	44,925✓
F. Public Entrance approach -	1,165	2,072	26,603	27,398	57,238✓	8,013✓	65,251✓
G. House of Lords, &c. - -	657	1,228	21,971	- -	23,856✓	3,340✓	27,196✓
H. Offices, Approaches, &c. -	1,428	2,546	25,508	12,346	41,828✓	5,856✓	47,684✓
I. House of Commons, &c. -	700	1,130	26,471	- -	28,301✓	3,962✓	32,263✓
K. Offices, Approaches, &c. -	555	1,092	14,023	3,156	18,826✓	2,635✓	21,461✓
	11,815✓	20,409✓	405,218✓	157,246✓	594,688✓	83,256✓	677,944✓
L. New Front to Courts of Law	671	1,339	24,984	14,269	41,263✓	5,777✓	47,040✓
£.	12,486✓	21,748✓	430,202✓	171,515✓	635,951✓	89,033✓	724,984✓

April 1836. Examined, *Thos. Chawner.*

234. Mr. *Hume.*] Will you explain to the Committee the general principle on which that estimate was made out?—The principle of this estimate is at per foot cubic, taking the cubical contents of the building. The price at which each foot cubic is charged, is obtained by reference to the cost of a building of exactly the same architectural character and amount of decoration The building I allude to is the Birmingham Grammar School, of which I know exactly the cost, as well as the prices at which all the materials are charged; I have therefore added to those prices such sums as will make them equal to the London prices for labour and materials, and so ascertained the price per foot cubic, as applicable to a building erected in London of certain materials. I have chosen to pursue this principle, because I conceived that, under the circumstances, that it was the most correct one that could be adopted, inasmuch as it would be necessary if the whole of the proposed building was to be measured as to the exact quantities of materials and labour, that the whole of the working drawings of the building should be previously prepared.

235. Making allowance for the greater dimensions of this building, can you separate the quantity of stone-work, of brickwork, the number of loads of timber and iron-work, distinguishing also those portions of the building which are to be made fire-proof; and is not that requisite to arrive at a correct estimate of the whole?—Yes, I am able to do that, but have not thought it necessary, under existing circumstances.

236. Mr. *Hughes Hughes.*] Have the goodness to state the stone of which the Birmingham School is built?—It is a Derbyshire stone, from Darley Dale.

237. Mr. *Hume.*] Can you state the estimate of the quantity of ornament on the surface of the walls, and does that form a separate estimate?—I should like to understand what is intended by ornament.

238. The Gothic tracery outside; I call all that ornament as opposed to plain surface?—Then the difference required is between the plain stone wall, and as contrasted with the decorations shown by the design.

239. In the plan are there not provisions for niches and statues?—In which plan?

240. In your amended plan?—In the amended plan the niches are omitted.

241. Then that expense will be saved?—Yes.

242. Is that part of the 50,000*l.* the Committee understand will be saved by the alteration?—Yes, by the omission of the niches, statues and panelling.

243. Are you of opinion that persons accustomed to make estimates could, from your drawings as now given, form a tolerable estimate within 30,000*l.* or 40,000*l.*?—I think they could.

244. Then you consider your estimate to be within that amount correct?—Yes, I do, certainly.

245. Can you state what you have estimated the expense of the foundation, and what quantity of concrete?—Yes.

246. And the rate at which that is to be filled in?—Yes, the quantity of concrete is four feet in depth under the whole of the walls, and the height of the brickwork over the concrete to the level of the ground, is seven feet nine inches.

247. Mr. *Warburton.*] Have you ascertained the depth of the earth that you will be obliged to dig out, in order to arrive at the bed of gravel which lies below the surface?—I have ascertained that fact, by a reference to the depth of excavation which was made for the Westminster Hospital.

248. Sir *Robert Peel.*] What do you purpose to do with the present Houses of Parliament during the progress of your plan?—To leave them as they are.

249. Will the execution of your plan interfere with them?—No, it will only interfere with the State Officers rooms, private entrances, &c. of the House of Lords.

250. Will there be any interval during which the present Houses cannot be used?—The new Houses may be completed before it will be necessary to vacate the present temporary buildings.

251. Mr. *Hume.*] What is the amount of the expense of the concrete?—The entire amount is 12,486*l.*

252. At what per yard?—Seven shillings and sixpence.

253. The cubic yard?—Yes, the cubic yard; the expense of the brickwork over the concrete forming the foundations, is 21,748*l.*

254. Sir *Robert Peel.*] There is to be an embankment?—Yes.

255. Will the concrete extend into the embankment?—Yes, and under the whole of the walls of the proposed building.

256. Will the foundation extend in the proposed front beyond the bank of the river?—Yes, the concrete will extend four feet beyond the footings of the walls abutting upon the river.

257. Do the footings of the wall extend beyond the present bank of the river?—Yes, considerably beyond the present banks.

258. Then the building will stand upon an embankment?—Yes, partly so.

259. Is there not a difference of expense for the concrete near the banks and on the main land?—No, the same price applies to the whole.

260. Does the 7*s.* 6*d.* per cubic yard include the digging?—Yes, it does.

261. And laying in of the concrete?—Yes.

262. And every expense connected with it?—Yes.

263. Mr. *Warburton.*] What does the concrete consist of?—Of lime and gravel, or ballast from the river.

264. Is the thickness of the concrete, at four feet below the walls sufficient?—Yes, that is my opinion.

265. Sir *Harry Verney.*] Does that bring you down to the bed of the gravel?—Yes.

266. Mr. *Hume.*] Supposing the embankment made into the river; how near does the corner of your building come to the water?—The wings of the river front rise immediately out of the water. With the permission of the Committee I will state the alterations which have been made: the original line contained an angle in the direction of the second pier of the bridge; by the late change the line is now straight, and in the direction of the third pier of the bridge, and projects from the embankment at the south end of the site about 88 feet.

267. Are we to understand that the wing of the building rises immediately from the water at the southern part of the embankment?—Yes.

268. You are well acquainted with the degree of ornament on Henry the Seventh's chapel; can you give the Committee an idea as to how far the ornament on the face of your proposed building will be richer, or what comparison the ornaments will bear to those of Henry the Seventh's chapel?—The fact is, there

there is no comparison between them; the front of Henry the Seventh's chapel is panelled all over; in the front of the proposed building it is not intended to panel the plain face of the walls.

269. How is it as to the great tower?—The great tower is more ornamented than any other portion of the building, and there are some panels there between the windows; but it is by no means panelled all over like Henry the Seventh's chapel.

270. Not so rich?—Certainly not.

271. What kind of roofs do you mean to put on the building, and what estimate have you made of them?—I have made no separate estimate; but I can ascertain the amount if it be the wish of the Committee. The covering is to be of slate.

272. Then are the Committee to understand that the estimates that you have given in are on that general principle that you have stated, as to the quantity and amounts, such that you can rely upon?—Yes.

273. And you have no doubt of their accuracy to the extent you have stated?—I feel confident of the result.

274. Can you state at what price you have estimated the timber you use?—At six guineas a load, the prime cost.

275. Mr. *Warburton.*] Is not that a very high price?—It is the market price; it might be got in a large quantity at a less price.

276. Do not you think five guineas would give a reasonable profit?—Scarcely.

277. Sir *Robert Peel.*] What has been the rise of timber within the last two years?—I should think about 10 per cent.

278. Do you think that the surface of the buildings will be subject to constant decay, as Henry the Seventh's chapel has been?—By no means; it will very much, of course, depend upon the nature of the stone used, but it will not be so liable in any thing like the same proportion to decay as Henry the Seventh's chapel.

279. Are you aware that the surface of that chapel has been renewed more than once?—I am quite aware of its being repaired once.

280. What stone was it before the last renewal?—I am not prepared to say.

281. Mr. *Warburton.*] Was it not some soft oolite lime-stone?—I am not aware.

282. Do you think you will be able to obtain stone that will stand the weather better than Henry the Seventh's chapel?—Infinitely better.

283. To what extent do you propose to use granite in the building?—Not at all.

284. Not towards the foundation?—No.

285. Should you recommend siliceous grit?—For the front of the embankment, including a portion of the base of the building, I should.

286. Mr. *Hume.*] Can you point out any building in the country, ornamented as this will be, that has not suffered very much from the weather?—Do you mean modern buildings?

287. Ancient or any buildings?—I can point out some examples that have not suffered; those which have do not immediately occur to me.

288. *Mr. Chancellor of the Exchequer.*] Having stated the price of stone at 4*s.* per foot, is that founded upon the assumption of getting the best stone in your judgment that can be prepared for the building?—It is founded upon the presumption of getting the most costly stone that is applicable to the purpose.

289. Sir *Robert Inglis.*] You mean that the most costly stone and the most available stone are convertible terms?—Yes; in regard to the quality of stones, there are several points for consideration; what may be a durable stone, may be a stone which will harbour the filth and smoke of the London atmosphere; I should say that siliceous stone was not so likely to imbibe the filth of the London atmosphere as the lime-stone and some of the oolites. I should wish to state, that one of the oolites is as good and as durable a stone as can be used.

290. Mr. *Hume.*] May I ask you, strictly speaking, what style you consider this building to be?—It is of the third style of Gothic architecture, including the Tudor period.

291. Are the Committee to understand you, there is no difficulty as regards the durability, although it may be ornamented to a certain extent?—I have no doubt about it.

292. Mr. *Wynn.*] Are you aware for what period Henry the Seventh's chapel stood before the surface was renewed?—I cannot exactly answer that question; because I rather think it has had a second facing, but of that I am not certain; if

that was not the case, there would be no difficulty in answering the question, as it would be from the time of its original erection.

293. Sir *Harry Verney*.] Would your building be more liable to perish than St. Paul's Cathedral?—Certainly not.

294. St. Paul's is built of Portland stone?—Yes.

295. Has not that stood remarkably well?—Yes.

296. Sir *Robert Inglis*.] Can you state what is the nature of the foundation on which Westminster Abbey rests, and whether it be true that Westminster Abbey is on an island of gravel formed between two old streams, one of which fell into the Thames at George-street, and the other the south of the Chapter-house?—I have reason to believe that it does.

297. That same island of gravel is the foundation of Westminster-hall and of the old palace in which the two Houses of Parliament were placed?—Yes.

298. Assuming that the grant of money taken last year was at this moment available for the purposes of the embankment, and that you or any other party who might be interested in the execution of it, were to begin that portion of the work, say on the 1st of June, what is the period at which, in your judgment, it would be so situated and completed as to enable you to commence the foundation of your great building?—My answer to that is, it would be desirable to carry up a portion of the foundation of the proposed building, together with the embankment, because a portion of the building actually forms the line of embankment.

299. Then no time has been lost hitherto by not having commenced the embankment?—Certainly not.

300. Sir *Robert Peel*.] Is there any authority for a building of this style, except as applicable to ecclesiastical buildings?—Yes, I should say the Town-halls in the Netherlands.

301. Sir *Robert Inglis*.] The town-hall of Brussels?—Yes.

302. Sir *Robert Peel*.] Are there towers also there?—It has one tower.

303. Are there buttresses?—There are angular projections between the windows which may be called buttresses.

304. Sir *Robert Inglis*.] In what period do you apprehend (the foundation being laid in the course of the present summer) the two Houses of Parliament would be fit for the reception of the Members?—In about two years.

395. From the period when the foundation is laid?—Yes.

306. Has it been part of your duty to consider the effect which the embankment, proposed to extend to the third pier of Westminster Bridge, would have on the current and navigation of the river, and have you provided for any detrimental effect which might be produced by such an embankment to the south of the bridge by any corresponding embankment on the north of the bridge?—I have considered that the embankment will of course increase the velocity of the current, and that the bed of the river would be deepened in consequence; I consider that I have made allowance for that in the depth of the foundations, inasmuch as they will be found to be three feet below the foundation of Westminster Hall.

307. Does your answer refer to the double subject of the security of your own foundation and to the navigation of the river, or to one or the other?—To both. I stated that I supposed that I had every reason to believe that the current would be very much increased, and I had provided for the effect of such an increase; but with respect to the embankments generally, I have not been consulted.

308. Mr. *Hume*.] Would you consider your design complete without the great tower?—I should not; at least I should consider it a very important omission.

309. In its isolated appearance at the extremity of the building, will not the increase of length which you have given (50 feet) throw that tower into Abingdon-street, and therefore very much prevent the effect which was expected of the view of the building from the bridge?—Not at all.

310. Would it not make the general building appear rather diminutive from its great height?—I have no fear of that.

311. Will you state to the Committee why you have moved the site of the building 90 feet from the bridge, when you stated you desired, and that it was an advantage to shut out the bridge from Palace-yard?—Although the removal has taken place, the whole of Palace-yard is as effectively closed as in the first design, by means of the projection of the clock tower.

312. What is the advantage in moving this part of the building, the wing,

90 feet from the bridge?—Because it might have been considered as too much crowding upon the bridge.

313. Does not the effect of the tower, seen from the bridge, very much increase the distance, and is not the effect lessened by that increased length?—Not in the least degree.

314. Is there any view from the bridge of any portion of the front of Westminster Hall and the law courts by your plan?—Does the question mean from any portion of the bridge?

314*. From the centre of the bridge?—Certainly not.

315. Will any portion of the front of Westminster Hall and the law buildings harmonize with this tower, or any portion of the buildings adjoining it?—The entire building will be in harmony.

316. When altered agreeably to your plan it would be so?—Yes.

317. Is the alteration here shown on this plan included in the estimate that you have given?—Yes.

318. The whole?—Yes.

319. Will you state if there are any rooms or places of accommodation in the great tower or in the others required for the use of Parliament?—A portion of the accommodation required is included in the great tower.

320. What portion?—The Record Rooms.

321. Were the Record Rooms pointed out by the Commissioners?—When I say record rooms, I mean fire-proof depositories, which were mentioned in the instructions.

322. In what part of the tower were they to be?—In each story.

323. Can you state what the level of the top of the building will be, as compared with the centre of Westminster Bridge?—About 60 feet above that level.

324. Could not a better idea be formed of your building if a model was made of it than by any plan that is here?—Yes.

325. How long would it take to form that?—I cannot say; it would depend very much upon the nature of the model, whether it was a block model, or one of detail.

326. Suppose it was a model showing the exterior with the towers, the relative situation of both houses, with the committee rooms and principal buildings, including also Westminster Hall front surrounding the Law Courts?—It would depend whether the Committee thought a block model would be sufficient to answer that purpose.

Mr. *Thomas Chawner*, called in; and Examined.

327. Mr. *Hume.*] WHAT situation do you hold in the Woods and Forests?—One of the architects in the Woods and Forests.

328. Are you in the practice of estimating buildings?—Occasionally.

329. Have you examined the plans of Mr. Barry for the two Houses of Parliament?—Yes.

330. Have you gone into the detail of the quantity of stone-work, brick-work, and timber, iron, and other particulars?—No.

331. Have you seen an estimate given in by Mr. Barry?—I have.

332. It is understood you concur in that estimate?—As far as I have ticked that estimate, I concur in it. This paper or abstract by Mr. Barry was signed by myself for Mr. Barry's satisfaction as having examined the paper. The general principle was explained to me by Mr. Barry, but I did not go into detail, as I had not an opportunity.

333. Mr. *Warburton.*] What were the principles that were explained to you by Mr. Barry, on which, to a certain extent, you approved of this estimate?—Mr. Barry stated that there were a certain number of cubic feet of building, and that he had drawn out a comparison from other buildings which he had erected as to the cost per foot cube, and he also explained to me that the prices at which the work was estimated were the prices of the day.

334. Do you mean the price of materials?—Yes, the price af materials and labour. I checked these sums, and ascertained the totals, and conferred with Mr. Barry on the subject of the propriety of 14 per cent. being added to his gross amount, on which I found the gross amount would be 724,984*l.*, or upon the whole, between $9\frac{1}{2}d.$ and $9\frac{3}{4}d.$ per foot cube, exclusive of foundations and allowance for contingencies, which would amount to $2d.$ a foot extra.

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335. At any former period have you been led to form a similar gross estimate of the cost of any building before it was executed, and afterwards have you found that such a mode of grossly estimating the account has come near to the truth?—No, I have not done so without having detailed specifications and amounts, and drawings. I do not see how it is possible to arrive at a nearer conclusion.

336. Mr. *Hume.*] Then you have not had those details and amounts?—I had not.

337. You cannot rely upon that as a correct estimate if you had not the materials to enable you to judge?—I have only had the materials to a certain extent, not the details.

338. Mr. *Warburton.* Within what degree of accuracy do you imagine that you arrive at a correct result by estimating a building in that way?—Mr. Barry has erected a variety of buildings, and in several of them he stated what were the number of feet cube, and what was the cost of the buildings, and that none of them turned out to the amount per foot cube, which appears on the face of this paper.

339. Did Mr. Barry produce to you the number of cube feet in the buildings which he had erected, and give you a statement of the several accounts of these buildings, and did you then from those data arrive at the conclusion that the cost of the proposed building would be included within the stated estimate?—He did.

340. You did go into that sort of examination?—Yes.

341. Sir *John Hobhouse.*] Do you think you can state fairly upon the whole, that that is a maximum of the expense that may be relied on?—Yes, upon the understanding of material reductions in the ornamental parts of the original design, and that the interior generally will be finished in as plain a manner as is consistent for the relative apartments.

342. Mr. *Tracey.*] Have you taken the materials at the very highest prices?—They were considered the prices of the day.

343. Sir *John Hobhouse.*] Which are high prices?—Yes.

344. Mr. *Hume.*] Did you examine the superficial feet of the bulk of the building?—Yes.

345. You have made a calculation with Mr. Barry?—Yes.

346. You are not able to tell from your own measurement what quantity of brick-work or stone will be required?—No.

347. Are you able to tell the quantity of timber?—No.

348 *Sir Robert Inglis.*] You have taken all these data from Mr. Barry?—Yes.

349. *The Chancellor of the Exchequer.*] Have you any means of forming a closer estimate without the working plans?—Certainly not.

Mr. *Henry Arthur Hunt*, called in; and Examined.

Mr. *H. A. Hunt.*

350. Mr. *Hume.*] ARE you a surveyor?—Yes.

351. Are you accustomed to make out estimates for buildings?—For the last seven years I have been so engaged.

352. Mr. *Warburton*] When, for instance, a building is about to be contracted for, are builders in the habit of referring to you to make out estimates for them, so that upon your estimate they may form their tenders for the contract?—Yes.

353. You are greatly occupied in that way?—Yes.

354. Have you seen the amended plan of Mr. Barry's building, and have you formed an estimate of what it would cost?—Yes, I have.

355. Will you explain to the Committee upon what principle it is you have formed that estimate?—I have founded it upon two principles, the one principle shown to me and explained by Mr. Barry, and also with reference to buildings that I have estimated hitherto.

356. Now explain each of those principles?—The principle explained to me by Mr. Barry had reference to a building similar in many respects to the proposed design, namely, the Birmingham Grammar School, and I dissected the various parts of the building, and applied it according to my judgment to the corresponding parts of this building, and I found that the inferences or the results which had been drawn by Mr. Barry were correct ones.

357. Were the bills of that building and the accounts laid before you?—It is contracted for at a gross sum.

358. Then

358. Then the contract was before you?—The amount of that contract was stated to me by Mr. Barry.

359. Will you state what the other principle was you went upon?—The other principle was this; I estimated the quantities of the Carlton Club-house; I was employed by all the builders who tendered for that contract to furnish them with the estimate of the quantities, each of them having the same, they relying on my calculation to form their estimate.

360. Your plan is in case of a contract for building to furnish each of the builders proposing to contract, with the quantities, and upon those quantities they put their prices for the labour and materials and profits that they intend to lay on, and upon this they found their tenders?—Yes, exactly so.

361. Mr. *Chancellor of the Exchequer.*] How did you apply that principle to the estimate of the present plan?—By finding the cost per foot cube of that building, and adding a little less than one-half to my calculation of the present building for the additional external decoration.

362. Are the Committee, then, to understand that the present estimate exceeds by one-half the estimate of that building?—A little less than one-half.

363. Mr. *Warburton.*] Have you taken into account the great thickness of the walls and the solidity of the proposed building, and the greater degree of ornament?—Yes.

364. Did Mr. Barry explain to you the great solidity of the walls, and show the plans, from which you could judge that there would be a greater degree of ornament, and from this data are you led to believe that the extra half will cover that extra expense?—My opinion is that it will.

365. Have you been led, from the former estimates that you have made, to judge that this gross mode of estimating the cost of a building will not greatly differ from the ultimate result, presuming that there will be no great variation between the present prices and the prices at the time of the completion of the building?—I think that such an opinion is a correct one, and that it may be done for the money; and I know of no other method of forming a correct judgment of the cost of a building beforehand, unless there were detailed specifications and working plans.

366. Did you take into consideration the present cost of timber and stone?—Yes.

367. And brickwork?—Yes, I did.

368. And upon these assumed prices you founded your estimate?—Yes.

369. Mr. *Chancellor of the Exchequer.*]—How long have you been engaged professionally in this pursuit?—I was two years in partnership with another gentleman since that; for the last five years I have been in business for myself, and I think I can assure the Committee I have made as many large estimates as any other gentleman in the profession in the same time.

370. Can you refer the Committee to any of the particular estimates to which you allude, which have been made by you?—I made the estimate of the Carlton Club House, which I stated; the Oxford and Cambridge University Club House; the Atlas Fire Office, Bermondsey Grammar School, a portion of St. George's Hospital, &c.; and I assisted also in the estimates of the Westminster Hospital, the Westminster Prison and the New Hungerford Market. I could name several others, if it were necessary. I have been very much engaged of late since the railways have been in execution in making large estimates in that way, varying from 150,000*l.* to 200,000*l.*; and I am at this moment engaged upon one of about 100,000*l.* for a contractor.

371. Can you state to the Committee any of the architects or builders who have been accustomed to apply to you?—All the large builders in London have taken my quantities. My father is a very extensive builder himself, and was the builder of St. Katherine Docks, and other large works. Messrs. Grissell & Peto, who are also very extensive contractors, have uniformly employed me in preference to any other professional man.

372. Has the course which you have taken in the investigation of this estimate been the same course that you have been accustomed to take in the other estimates to which you have alluded?—No; because in the other estimates I have had detailed specifications and working drawings, made with a view to a number of builders and contractors, forming their estimate upon them.

373. Has the present mode of investigation, which you have applied to these

Mr. *H. A. Hunt.*

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plans, been the best which you can suggest in the absence of the detailed specification and working plans?—Undoubtedly.

374. When you formed the estimate in the preceding cases, how have those estimates generally corresponded with the actual cost of the execution?—If there has been no alteration made by the committee or the proprietors, the buildings have been executed for the money for which they were contracted.

375. Sir *John Hobhouse.*]—Can you mention any particular instance on a large scale where the result has corresponded with your original estimate?—The Carlton Club in Pall Mall was executed for something less, I think, than the original contract; but in consequence of certain additions made by the committee, it came to about 2,000*l.* over.

376. Mr. *Chancellor of the Exchequer*].—Do you feel such a confidence in the investigation of this estimate as to be able to state to the Committee that you do not anticipate much variation where the working-plans and specifications are produced, if the plan is adhered to?—According to the best of my judgment and belief, I am of opinion that it can be done for the money.

377. Mr. *Hume.*]—In estimating the Carlton Club, did you not measure and calculate the quantity of the respective walls and work that was to be done?—Yes.

378. Did you not enter all these in a book?—Several books.

379. Did you measure and calculate the quantity of the work estimated in this building?—I have already stated it is a moral impossibility to do so.

380. Then how have you obtained the quantity on which to form the estimate?—By the cube of the several parts.

381. Have you measured them yourself?—Mr. Barry has them; I went over Mr. Barry's calculations; it is a mechanical process, and requires no ingenuity at all. I stake my reputation that it is perfectly correct.

382. How did you make the calculation?—There is only one way; I made the estimate by taking the cubical contents; I measured the whole of the fronts, and took the contents of the fronts themselves and the contents of other parts of the building, and upon the whole I found the result to be $9\frac{1}{2}d.$, or $9\frac{3}{4}d.$ per foot cube and $2d.$ for contingencies of various kinds, say $1s.$ per foot cube on the whole.

383. Mr. *Hume.*] How do you distinguish the amount of stone from brickwork?—It is impossible to do so.

384. Mr. *Warburton.*] You have taken a high priced stone?—I have calculated it will be all high priced stone.

385. Mr. *Hume.*] State the data on which you made the allowance for stone and brickwork?—I have already stated to the Committee that I did it from data I got as to the Birmingham Grammar School.

386. Is not the Birmingham Grammar School only one floor?—Several floors; the library is one floor, and there is the ground floor.

387. In what manner did you ascertain the quantity of timber?—I have already stated to the Committee it is impossible to ascertain that.

388. Did you ascertain the quantity of lead?—My answer as to timber applies to all materials; it is impossible to ascertain it.

389. If you are not able to select the quantity, how can you form any estimate?—By other buildings.

390. Was it stated to you what quantity, of work would be fire-proof, and whether that would be attended with any additional expense or not?—I have taken it as a building on the most improved principle, such as Mr. Barry is now erecting, with fire-proof rooms.

391. You are aware an ornamental building is more expensive than a plain one?—Certainly.

392. What do you allow for the ornament on the face of this building as distinguished from the mere quantity of cube feet?—I have allowed one-half more than for an ordinary building.

393. Is that the allowance for the additional ornament and stone?—Exactly so; I draw an inference from the Carlton Club and the Oxford and Cambridge Club-houses; they are plain buildings in appearance, but very expensively constructed and finished.

394. Then how do you compare these two club-houses, which appear to be plain and of a different style of architecture, with the ornamental parts of either of these towers; what allowance do you make for the difference?—I have allowed

allowed a little less than one-half of the cubical contents of the buildings, as I have before stated.

395. Then have you yourself calculated the cubical contents?—Yes.

396. The whole?—Yes.

397. Is it only a rough guess?—It is not a guess; it would be impossible to give an exact estimate of the quantity of timber, stone, lead or other materials which would be required, without a detailed specification and working drawings, which would occupy twelve months in preparing, and it would then require me to devote four months to the estimate.

398. Do you mean to say from that plan of Mr. Barry you could not form an estimate of the cost within 30,000*l.* or 40,000*l.*?—Certainly not; I could not venture to do so.

399. Mr. *Warburtom*] In comparing the cost of the proposed buildings with the Birmingham Grammar School, or the Carlton Club House, or any other, were the prices of materials at the time that those works were executed placed in your hands?—I have seen them since, because I have been engaged in measuring the extra works.

400. So you could form some rude estimate how far the cost of materials would affect the comparative cost of the building proposed?—I should say myself that at least this building would not be executed at higher prices than the Carlton Club House.

401. Mr. *Chancellor of the Exchequer.*] You would not be prepared to give such an estimate as you gave for the Carlton Club House, until the working drawings are made?—Certainly not. In all the estimates I have spoken to I have had drawings and plans, and every possible information, and if I were to give a wrong estimate, I should be liable for the deficiency.

402. Mr. *Warburton.*] Do you mean the estimate?—No.

403. You only furnish to the builders the quantities?—Yes; and what deficiency there is, I am liable to pay for.

404. Mr. *Hume.*] If you give a quantity to the builder, say 1,000 loads, and he is to furnish 1,100, would you be liable?—I am liable.

405. Mr. *Hume* to Mr. *Barry.*] How long would it take a person to make a detailed specification and the working drawings, so as to enable a correct estimate to be formed of the whole building?—At least a twelvemonth.

406. Mr. *Warburton* to Mr. *Hunt.*] How long should you be making your report upon that?—I should say at least four months. It is a very laborious operation; but it is very satisfactory after it is completed.

APPENDIX.

The following Paper was communicated to Mr. Barry on the 3d May, to which he, on the 9th, returned the subjoined Answer.

The Committee are not satisfied on the head of expense; and before any part of the Building be commenced, or any Vote can be proposed to Parliament, there must be the most minute and accurate Estimate that can be formed.

The Committee are prepared at once to recommend that the preparation of that Estimate be committed to Mr. Barry, subject to such examination and check on the part of the responsible department of the Government as may be deemed advisable, and on the understanding that the Committee do not thereby commit the Public in the slightest degree to the ultimate adoption of the Plan. The Committee foresee, however, every probability that that Plan will be adopted, provided the Estimate given in by Mr. Barry (all contingencies and extra expenses included) be not exceeded in any material degree.

The remuneration for preparing the working Plans and Specifications must be kept perfectly distinct from the consideration whether the Plan will be ultimately adopted or not, or what shall be the rate of remuneration for the execution of it. No engagement can be now entered into on that head; and the Committee are desirous therefore of ascertaining from Mr. Barry what sum he will consider a just remuneration for his time, labour and expense in making such complete working Plans and Specifications as shall enable an Estimate of his total charge, to be formed with the greatest attainable accuracy.

On the subject of remuneration for preparing working Drawings, a detailed Specification and Estimate, I am willing to place myself in the hands of the Government.

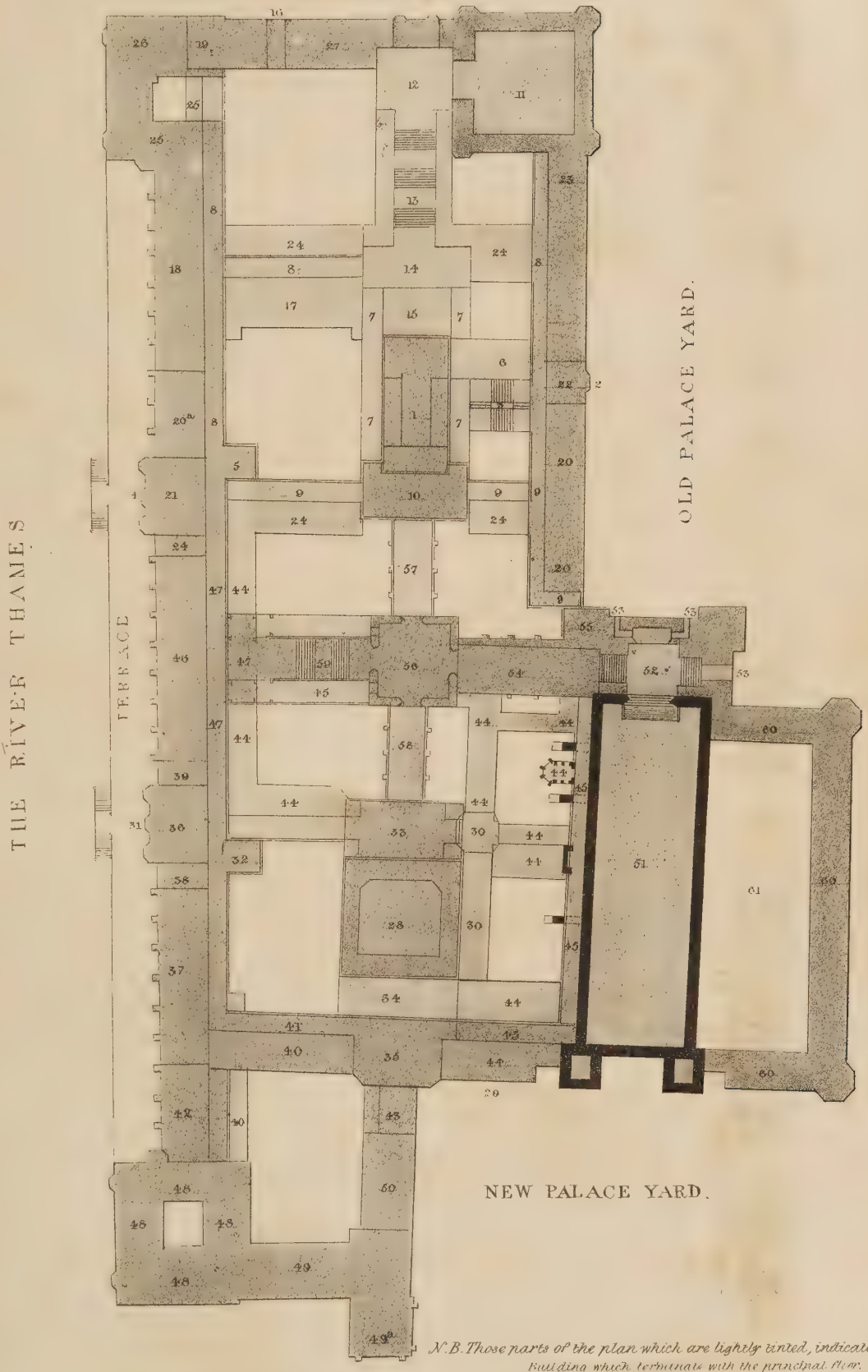
9 May 1836. *Charles Barry.*

EXPLANATION OF THE PLAN.

1. The House of Lords.
2. Entrance for Lay Peers from Old Palace Yard.
3. Staircase from the Entrance No. 2 to the level of the principal floor.
4. Peers' Entrance from the River Terrace.
5. Staircase from Peers' River Entrance to the level of the principal floor.
6. Ante-room to the House of Lords, from Peers' Entrance and Staircase Nos. 2 and 3.
7. Peers' Private Corridors connected with the House.
8. Other Private Corridors.
9. Public Corridors.
10. Public Lobby and Staircases to the Galleries of the House of Lords.
11. Tower, in the lower part of which is the King's State Entrance, the upper stories being depositories for records.
12. The King's Entrance Hall or Vestibule.
13. The King's Staircase from the level of the entrance to that of the principal floor.
14. The King's Gallery.
15. The King's Robing Room, with access to the House of Lords on each side of the Throne.
16. Gateway to Court in which is the Bishops' entrance.
17. Bishops' Robing-rooms.
18. The Lord's Libraries.
19. Refreshment Rooms for Peers.
20. Lords' Committee Rooms.
20a. Lords' Select Committee Room.
21. Conference Room.
22. Peers' Robing Room.
23. Robing and other Rooms for the State Officers.
24. Rooms for Officers of the House of Lords, for the Judges, for Counsel, Witnesses, and others, in attendance upon the House.
25. Librarian's Residence.
26. Residence for the Usher of the Black Rod.
27. Housekeeper's Residence.
28. The House of Commons.
29. Commons' Private Entrance, from New Palace Yard.
30. Staircase from Commons' Private Entrance to the level of the principal floor and inner public lobby at the head of the Stairs.
31. Commons' Entrance from the River Terrace
32. Staircase from Commons' River Entrance to the level of the principal floor.
33. Inner Public Lobby to the House of Commons, and Staircases to the Galleries.
34. Commons' Division Lobby.
35. Commons' Outer Lobby.
36. Commons' Writing Library.
37. Commons' Libraries.
38. Commons' Messengers' Rooms.
39. Commons' Librarian's Room.
40. Commons' Refreshment Rooms.
41. Commons' Private Corridors.
42. Rooms for the Chief Clerk of the House of Commons.
43. Speaker's Chamber.
44. Various Offices for the business of the House of Commons.
45. Public Corridors from the Public Central Hall to the Commons' Select and Unopposed Committee Rooms.
46. Commons' Select and Unopposed Committee Rooms.
47. Corridor and Waiting Hall for Witnesses, &c., private during the sitting of the Houses.
48. The Speaker's Residence.
49. Residence for the Serjeant-at-arms.
49a. The Clock Tower.
50. The Deputy Housekeeper's Residence.
51. Westminster Hall. Great Public Entrance or Vestibule in Common to the Houses of Parliament and to the Courts of Law.
52. St. Stephen's Porch; the Public Entrance to the Houses of Parliament through Westminster Hall.
53. Entrances to St. Stephen's Porch from Old Palace Yard and Parliament Square.
54. St. Stephen's Hall (the Old House of Commons). The Inner Vestibule to the Houses of Parliament.
55. Public Staircase from St. Stephen's Hall to the Offices of the House of Lords.
56. The Public Central Hall.
57. The Outer Public Lobby of the House of Lords.
58. The Outer Public Lobby of the House of Commons.
59. Public Staircase to the Commons' Committee Rooms in the floor above.
60. New Fronts to the Law Courts.
61. The Law Courts.

NEW HOUSES OF PARLIAMENT.

BLOCK PLAN, SHOWING THE LEADING PRINCIPLES OF THE ARRANGEMENT OF THE PRINCIPAL FLOOR.



N.B. Those parts of the plan which are lightly tinted, indicate portions of the Building which terminate with the principal floor.

100 50 0 100 200 300 400 feet.

R. Hawkins

Day & Haghe Lith. Printers

NEW·HOVSES·OF·PARLIAMENT·

VIEW·OF·THE·ADOPTED·DESIGN·AS·THE·BVILDING·WOVLD·APPEAR·FROM·THE·SVRREY·END·OF·WESTMINSTER·BRIDGE·

REPORT

FROM

SELECT COMMITTEE

ON

HOUSES OF PARLIAMENT;

WITH THE

MINUTES OF EVIDENCE.

Ordered, by The House of Commons, *to be Printed,*
9 *May* 1836.

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